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ABSTRACT

The National Capacity Building Institute 2001 meetings on transition to postsecondary education for people with disabilities included nationally recognized speakers, discussion groups focusing on current issues, and commentary from consumer/professionals. This document is a record of the proceedings and outcomes. Papers presented include: (1) "Framework for Discussion Issues and Challenges for Youth with Disabilities Preparing for Postsecondary Education" (Robert A. Stodden); (2) "Issues of National Significance: Secondary Preparation and Transition" (David R. Johnson); (3) "Secondary Education Standards and Academic Preparation" (Martha L. Thurlow); and (4) "Linkages and Supports to Employment" (Paul Wehman). Summaries of discussion group output on four major areas are provided. These discussions addressed supporting student empowerment, self-advocacy, and self-determination; working to provide quality experiences as well as accommodated experiences; enhancing the role of technology; and managing supports and related services. For each of these areas, the issues are identified and recommendations are made for research, training, and information dissemination. A list of Institute participants is included. (CR)

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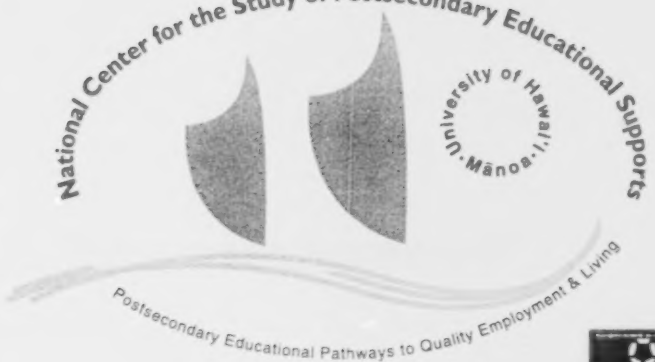
National Capacity Building Institute

2001

Preparation of Youth with Disabilities for Participation in Postsecondary Education & Lifelong Learning

Proceedings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Postsecondary Educational Pathways to Quality Employment & Living

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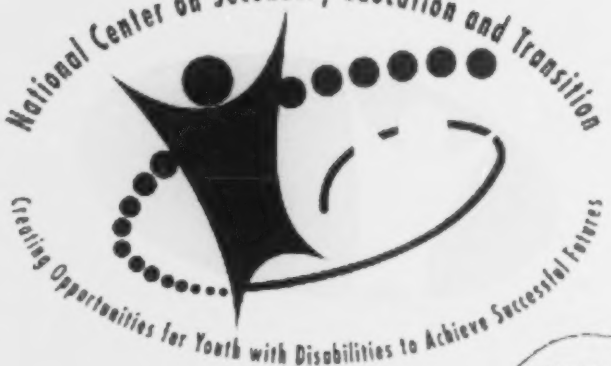
National Center on Secondary Education and Transition
Creating Opportunities for Youth with Disabilities to Achieve Successful Futures

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The Vision:

Enhancing the quality of life of youth with disabilities by promoting full participation in meaningful life-long learning, employment, and independent living

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The National Capacity Building Institute was held March 7-9, 2001 in Honolulu, Hawaii. A joint effort of the National Center for the Study of Postsecondary Educational Supports (NCSPES), University of Hawaii at Manoa and the National Center on Secondary Education and Transition (NCSET), University of Minnesota. The three day Institute included nationally recognized speakers, discussion groups focusing on current issues and commentary from Consumer/ Professionals on transition to postsecondary education for people with disabilities. The following document is a record of the proceedings and the outcomes that resulted from this gathering of professionals, educators, and consumers.

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Topic: A Framework for Addressing Issues and Needs in the Preparation of Youth with Disabilities for Postsecondary Education

Discussion Questions:

1. Given the review of postsecondary education and students with disabilities conducted through the NCSPES, what other issues do you think need to be explored?

2. Given the benefits of postsecondary education for youth with disabilities, in terms of increased opportunities for employment and an improved quality of life, what are ways to drive this point home to secondary school educators and guidance counselors?

3. How can secondary school teachers and other personnel better prepare youth with disabilities to be ready for expectations as experienced in postsecondary education and subsequent employment?

Related Implication Briefs: Studies 2, 3, 4, 5, 6, 9, 10, 12, 13, 14, & 15

Discussion Paper

Postsecondary Education Supports for Students with Disabilities: A Review and Response

Robert Stodden, Ph.D.

Washington D.C., July 23, 1998- Americans with disabilities still face gaps in securing jobs, education, accessible public transportation and many areas of daily life. Those findings were presented in a new U.S. survey of 1,000 adults with disabilities announced today by the National Organization on Disability (N.O.D.). Alan A. Reich, President of N.O.D., stated "[t]hese gaps are unconscionable. America must do better" (N.O.D., p.1). Only 29% of persons with disabilities, ages 18-64, work full or part time, compared to 79% of the non disabled population, and approximately one in five (20%) adults with disabilities have not completed high school, compared to 90% for adults with no disabilities (N.O.D., p.1). This article conducts an extensive review of literature concerning participation and support of persons with disabilities in postsecondary education settings. Also, the article discusses efforts to respond to identified needs and issues through the efforts of a Rehabilitation, Research and Training Center focused upon Post Secondary Education Supports at the University of Hawaii, Manoa.

Introduction

The Amended Rehabilitation Act of 1992 (PL 102-569) clearly acknowledges that "disability is a natural part of the human experience and in no way diminishes the civil rights of individuals." Despite this legislation, as noted by Alan Reich, persons with disabilities continually encounter various forms of discrimination in such critical areas as postsecondary education, transportation, health care, and employment (Walker, 1996; Esses, 1993). Given the increasing need for persons with disabilities to succeed in postsecondary educational programs, thus being able to access and participate successfully in the work force, it is imperative that we understand present and future needs, emerging strategies, technologies, and approaches to enhancing access, participation, and performance for persons with disabilities in postsecondary education.

The passage of the Americans with Disabilities Act (ADA) in 1990 (PL 101-336), along with the recent reauthorization of the Individuals with Disabilities Education Amendments of 1997 (PL 105-17), has led to an expanding social awareness of accessibility and disability issues, as well as increased numbers of students with disabilities seeking access to colleges, universities, and vocational technical programs (Adelmen & Vogel, 1992; Blackorby & Wagner, 1996; Benz, Doren & Yovanoff, 1998; Bursuck & Rose, 1992; Fairweather & Shaver, 1991; Henderson, 1995; Stodden, 1998). The number of postsecondary students reporting a disability has increased dramatically, climbing from 2.6% in 1978, to 9.2% in 1994, to nearly 19% in 1996 (Blackorby & Wagner, 1996; Gajar, 1992, 1998; Wagner & Blackorby, 1996). Since 1990 there has been a 90% increase in the number of colleges/universities, technical institutions, community colleges and vocational technical centers offering opportunities for persons with disabilities to continue their education (Brinkerhoff, Shaw, & McGuire, 1992; 1993; Bursuck & Rose, 1992; Pierangelo & Crane, 1997). Nonetheless the enrollment of people with disabilities in postsecondary institutions is still 50% lower than enrollment among the general population. This gap in educational attainment significantly affects the long-term career and employment prospects for persons with disabilities.

Impact of Postsecondary Education on Employment

Over the past twenty years changes in the nation's labor market have increased the importance of having a postsecondary education in order to be able to compete in the job market. Whether it is college, adult and continuing education, or technical preparation, postsecondary education plays a major role in preparing persons for employment and career opportunities. Students who continue their education after high school maximize their preparedness for careers in today's changing economy as they learn the higher order thinking and technical skills necessary to take advantage of current and future job market trends.

Research demonstrates that persons with disabilities are negatively and disproportionately affected by changes in general employment trends (Yelin & Katz, 1994a, 1994b). In recent studies, older men with disabilities experienced a higher rate of decline in labor force participation rates than older men without disabilities (Yelin & Katz, 1994a). Similarly, persons with disabilities experienced a larger relative drop-off in employment in the areas of manufacturing than persons without disabilities, while also experiencing a larger relative increase in employment services (Yelin, 1992; Yelin & Katz, 1994b). Thus it appears that people with disabilities, as with other minority groups, face labor market liabilities which often place them in the position of being the last-hired and the first-fired (Trupin, Sebesta, Telin, & LaPlante, 1997; Zemsky & Odel, 1994). Indeed, findings indicate that disability may combine with gender, age, and race to place some persons with disabilities at a greater disadvantage in the job market (Yelin & Katz, 1994a; Reskin & Roos, 1990).

With these poor employment figures for persons with disabilities, access to postsecondary education becomes that much more critical. A clear positive relationship between disability, level of education, and adult employment has been firmly established (Benz, et al., 1998; Blackorby & Wagner, 1996; Gilson, 1996; Reis, Neu, and McGuire, 1997). Gilson (1996) documents that the completion of some type of postsecondary education, including vocational education, significantly improves the chances of men and women with disabilities to secure decent and meaningful employment. In fact, employment rates for persons with disabilities demonstrate a stronger positive correlation between level of education and rate of employment than we see in statistical trends for the general population (Stodden, 1998). In 1996, the U.S. Bureau of Census statistics indicated labor force participation rates at 75.4% for persons with less than a high school diploma, 84.6% for those with a diploma, 87.8% for persons with some postsecondary education, and 89.7% among persons with at least four years of college. Proportionately, these labor force participation rates increase even more sharply when compared to increasing levels of education and persons with disabilities. Deplorably, only 15.6% of persons with less than a high school diploma currently participate in today's labor force. However, this participation doubles to 30.2% for those who have completed high school, triples to 45.1% for those with some postsecondary education, and climbs to 50.3% for disabled people with at least four years of college (Reskin & Roos, 1990; Yelin & Katz, 1994a, 1994b). As Gajar (1998) cautions, for individuals with disabilities, a university education is highly correlated with vocational options and financial success, or adult quality of life. Therefore, the cost of failure, both to these individuals as well as to society is a pressing concern (p. 384-85). Gajar's observation reinforces the necessity to: (a) focus attention on overcoming barriers to postsecondary education and employment for people with disabilities, and (b) identify educational accommodations and supports, including assistive technologies, that promote this population's successful completion of postsecondary education programs.

Barriers to Postsecondary Education

While the data show a consistent positive correlation between students with disabilities, valued employment prospects, and higher levels of education, as a population, postsecondary education enrollment levels for persons with disabilities (although on-the-rise) remains low in comparison to the general population. For example, 25% of students with disabilities age 14 or older, as compared to only 12% of nondisabled students, do not even complete high school (OSEP, 1996). Of those who graduate, 19% of students with disabilities, as opposed to 56% of students without disabilities, attend a postsecondary school within the first two years of exiting high school. Three to five years after high school, 27% of students with disabilities, as opposed to 68% of students without disabilities, attend some form of postsecondary education (Blackorby & Wagner, 1996; OSEP, 1992).

According to OSEP's Results of the Second PASS Field Test (1996), an extensive study of the types of services required by youth with disabilities exiting secondary school and making their transition to adulthood and postsecondary school programs, 80% of the sample required some type of case management services (OSEP, 1996). Assistance and training related to the areas of communication, including speech/language therapy, interpreter services, reader services, Braille training, and tactile interpreting services were cited as primary needs for over a third of the total sample.

Even with these supports meeting their primary needs, students with disabilities face a host of systemic, socio/cultural, financial and personal factors that contribute to low postsecondary enrollment rates. One of the first studies regarding implementation of the ADA, conducted in 1993 by the National Council on Disability, found that there was still a need for information and technical assistance, that minority persons with disabilities were not being adequately served, and that persons with certain disabilities were not being supported by the current levels of ADA implementation (Pfeiffer & Finn, 1997).

Other social and cultural factors continue to play a major role in discouraging students with disabilities from pursuing higher education. Media stereotypes tend to depict the disabled as victims employed in low-skilled jobs. Expectations that a student with disabilities will garner any additional job skills after high school remain low (Margolis, 1990). Persons with disabilities continue to be poorly represented among faculty, staff, and educational administrators, thus depriving students with disabilities of role models for postsecondary success (Grosz, 1998). All these factors, in combination with low expectations from teachers, counselors, and sometimes even parents, create powerful psychological obstacles to the pursuit of higher education (Dooley-Dickey, 1991).

Even when people with disabilities overcome barriers to enrollment in postsecondary education, disturbing evidence suggests that many of these students experience difficulty staying in and completing their programs of study (Blackorby & Wagner, 1996; Bursuck & Rose, 1992; N.O.D., 1998; Wagner & Blackorby, 1996; Witte, Philips, & Kakela, 1998). Failure to provide appropriate academic development services, supports, and programs for students with disabilities may cause them to achieve grade-point averages well below that of their nondisabled peers which, in turn, may hasten their withdrawal from postsecondary settings (Gajar, 1992, 1998). Further, Bursuck, and Rose (1992) have found that students with disabilities who earn a tangible certificate or degree take considerably longer to finish than nondisabled students. Clearly, postsecondary students with disabilities need more and better services, supports and programs both to access postsecondary education and to be successful in such a setting.

Regretfully, current research regarding the differential qualitative and quantitative effects of various accommodation services, supports, and programs upon postsecondary access, participation, and long-term outcomes (e.g., student retention, graduation, and vocational opportunity) is virtually nonexistent (Brinkerhoff, Shaw, & McGuire, 1993; Tindel, Heath, Hollenbeck, Almond, & Harniss, 1998; Gartin, Rumrill, & Serebreni, 1996). As Gajar (1998) chides, "the recent influx of students with disabilities into postsecondary settings has precluded the establishment of both a body of proven practices and a clear relationship between practices and outcomes. Services have evolved sporadically and programs have been pieced together in a haphazard manner (p.388)." It is essential that some basic data-based understanding of these issues be established through research. Studies need to be conducted not only on the characteristics and needs of the students with disabilities found in various postsecondary settings, but also on the unique characteristics of the postsecondary settings themselves (Gajar, 1992, 1998; Tindel, et al., 1998).

Self-determination: Turning Students into Self Advocates

The transition from secondary to postsecondary education for students with disabilities is complex and challenging. The differences between high school and postsecondary educational environments are more than cosmetic (Bursuck & Rose, 1992; Deshler, et al., 1996; Gajar, 1998). Students with disabilities graduating from high school move from a protective environment in which school personnel are legally responsible for identifying and providing appropriate services under the IDEA, to an environment in which the students are expected to identify themselves as a person with a disability and seek out and request specific accommodations under Section 504 and the Americans with Disabilities Act (ADA) (Gartin, et al., 1996,

p. 33).

Under Section II and Section III of the ADA postsecondary educational institutions, are "required by law to provide any reasonable accommodation that may be necessary for those persons with disabilities to have equal access to educational opportunities and services available to nondisabled peers, if requested" (Pierangelo & Crane, 1997, p. 156, [italics in original]). Unquestionably, postsecondary education students are charged with the bulk of the responsibility for initiating, designing, and ensuring their own educational accommodations (Battle, Dickens-Wright, & Murphy, 1998; Day & Edwards, 1996; Gajar, 1998; Milani, 1996; Tucker, 1997). It is their responsibility to inform school officials of their disability, provide documentation of the disability, and propose viable options for meeting the unique accommodation needs specific to their disability (Gartin, et al., 1996; Gilson, 1996; Milani, 1996; Reis, et al., 1997). For students with disabilities, this means that in order to be able to access, participate and perform successfully in postsecondary programs, they must be personally responsible for linking any accommodations they may require to their course of study (Brinkerhoff, 1994). Thus, self-advocacy/self-determination, or more specifically the ability to express one's needs, the ability to make informed decisions, and then advocate for that decision are considered to be the most important skills for students with disabilities to possess before beginning their postsecondary experience (Battle, et al., 1998; Benz, et al., 1998; Dale, 1995; Deshler, et al., 1996; Miller, Sidney, et al., 1995; Rusch & Chadsey, 1998; Skinner, 1998; Wehmeyer & Schwartz, 1998). The role of self-advocacy in determining the success of postsecondary students with disabilities, thus, must be a key area of study for researchers and an area of program focus for those working in secondary education.

Decreases in contact among teachers and students, increases in academic competition, changes in student support networks, and a greater expectation that students will achieve on their own, add to the difficulties of making a successful transition to a postsecondary institution for youth with disabilities. In contrast to high school, postsecondary services, supports, and programs available to students with disabilities: (a) vary extensively across states as well as campus-to-campus; (b) are generally not well developed programmatically, and (c) tend to lean toward advocacy, informational services, or remediation of content rather than training in the compensation areas necessary for independent learning and self-reliance (Gajar, 1992, 1998; Deshler, et al., 1996; Reis, et al., 1997) (NCSPES, 2000a).

Existing Supports for Students with Disabilities

Though variable in quantity and quality, support services to students with disabilities are available at most of the nation's 3,000 postsecondary institutions. Required to meet access mandates of the 1977 passage of Section 504 of the amended Rehabilitation Act of 1973, and more recently, under the Americans with Disabilities Act, schools have had to insure that the programs they offer, including extracurricular activities, are accessible to students with disabilities. Postsecondary schools have done this in a number of ways—for example, by providing architectural access; aids and services necessary for effective communication; and by modifying policies, practices and procedures.

Buildings constructed or altered after June 3, 1977, have had to comply with the relevant accessibility code required by Section 504 and, after January 26, 1992, the ADA. Qualified interpreters, assistive listening systems, captioning, TTYs, qualified readers, audio recordings, taped texts, Braille materials, large print materials, materials on computer disk, and adapted computer terminals are examples of auxiliary aids and services that provide effective communication. Legally, such services must be provided unless doing so would result in a fundamental alteration of the program or would result in undue financial or administrative burdens. According to a 1992 statement published by The Association on Higher Education and Disability (AHEAD), the U.S. Department of Education has yet to accept an argument for undue financial burden under Section 504. Any research program studying postsecondary supports should identify: (1) which of these services students find most effective; (2) how students would like to see the services delivered; and (3) how postsecondary institutions can accommodate student needs in ways that are empowering for students as well as being efficient and effective at the institutional level (NCSPES, 2000b) (Stodden & Dowrick, 2000a); (Stodden & Dowrick, 2000b).

One of the most challenging aspects of modifying classroom policies or practices for students with disabilities is that it requires prior thought and preparation. The difficulty lies in the necessity to anticipate

students needs and to be prepared to meet those needs, in advance. The actual modifications themselves, required by students with disabilities, may be relatively simple and inexpensive (John, 1993). Examples include rescheduling classes to an accessible location; early enrollment options for students with disabilities to allow time to arrange accommodations; substitution of specific courses required for completion of degree requirements; allowing students to use note takers or to tape-record lectures; allowing service animals in the classroom; or arranging for appropriate accommodations for test taking (Alster, 1997; Mellard, 1994). To reiterate, the only time when such modifications of policies and practices would not be required is when they would fundamentally alter the nature of the services, program, or activity.

It is important to remember that supports and services provided by postsecondary institutions are often relatively new and, thus, not yet well known by faculty members (Mellard, 1994; Minskoff, 1994) (NCSPES, 2000b). Faculty and other stakeholders, thus, may find it difficult to accommodate students simply because they lack an understanding of the students needs or familiarity with campus services (DeFur & Taymans, 1995; Scott, 1996). Moreover, the stigma attached to the need to self-identify for special attention, drives some students to elect not to disclose their disabilities in order to avoid being labeled disabled while on campus (Lynch & Gussel, 1996). Unfortunately, students who fail to identify themselves as disabled are often unable to access many of the supports designed to get them closer to having equal (rather than special) access to education (Gordon & Keiser, 1998) (NCSPES, 2000b).

Proposed Research Agenda

Although, a wide array of supports are being used to accommodate the needs of students with disabilities, understanding which specific accommodations are appropriate to the student and under what conditions these accommodations may be applied are issues that continue to dominate postsecondary conversations relative to students with disabilities. Definitions of what constitutes appropriate accommodations vary extensively (Eichhorn, 1997; Milani, 1996) (NCSPES, 2000b). Any research program, must plan to identify those emerging and exemplary strategies, technologies, services, supports, and programs that are most effective and successful in : (1) facilitating successful transition of students with disabilities from secondary to postsecondary settings, (2) improving student performance and graduation rates within those settings, and (3) promoting personally satisfactory employment outcomes for persons with disabilities leaving postsecondary education.

Given that most disability related services are a relatively new requirement within the postsecondary environment, and, it is likely that a disabled student will run into obstacles when attempting to set up necessary support services, a number of relevant research questions may be proposed: (1) To what extent is the requirement that a person disclose his or her disability in order to obtain services a deterrent to postsecondary enrollment and completion? (2) Are vocational rehabilitation or other funding sources for services not covered under the ADA or Section 504 of the Rehabilitation Act readily available to postsecondary students? (3) What kind of impact have various services and supports, including various assistive devices, had on students access, participation, performance and completion of postsecondary education? (4) What are the systemic obstacles to service or support provision in postsecondary education? (5) To what extent does helping students develop self-advocacy/self-determination skills assist in the process of planning for transition into postsecondary settings and student success within the postsecondary setting? and (6) To what extent do postsecondary educational institutions provide transitional support to graduates as they attempt to enter the labor force, and how does this effect career/employment outcomes?

Response to the Proposed Research Agenda

The Center on Disability Studies, at the University of Hawaii at Manoa, has been working in collaboration with the National Institute on Disability and Rehabilitation Research (NIDRR), to implement a Rehabilitation Research and Training Center (RRTC) for the Study of Postsecondary Educational Supports. The purpose of this RRTC or the National Center for the Study of Postsecondary Educational Supports (NCSPES) is to explore ways to increase access to and improve educational and employment outcomes for students with disabilities, in a variety of postsecondary educational settings, and to directly involve students with disabilities, families, educators and other support persons in such research activities. The Center is focused on the study of current support practices and models of delivery, identifying barriers to educational practices, disability related services and transitional

assistance, and providing training and technical assistance and information to support personnel, public and private rehabilitation personnel, career placement specialists, and students with disabilities. The Center is currently focusing on the following goals:

1. examine and evaluate the current status of educational supports, including individual academic accommodations, adaptive equipment, case management and coordination, advocacy, and personal counseling and career advising,
2. identify effective support practices and models of delivery that contribute to successful access, performance, and retention/completion of postsecondary programs,
3. identify specific barriers to the provision of disability related services in postsecondary education, including those related to policy and funding requirements,
4. assess the effectiveness of promising educational practices and disability related services that are important to career mobility and success in the workplace following participation in postsecondary education,
5. test the effectiveness of specific models of delivery that are believed to increase overall accessibility to educational supports and technologies,
6. identify the types of educational and transitional assistance that postsecondary programs provide to improve educational and subsequent labor market success fo persons with disabilities,
7. provide training, technical assistance, and information to educational support personnel, public and private rehabilitation personnel, career placement specialists, and students with disabilities based on the findings and implications of research, and implement a consumer-driven empowerment evaluation plan for assessing the RRTC's progress in achieving its goals.

Summary

With the goal of reducing personal, administrative, social, and cultural barriers to accessing and succeeding in postsecondary education programs, a systematic and strategic research approach has the potential to dramatically improve the quality of employment and living for persons with disabilities. While the value of attaining higher levels of education may not be entirely quantifiable, we do know that graduates of postsecondary education institutions can expect to earn at least $250,000 to $600,000 more over their lifetime than high school graduates (High Hopes, 1998). We also know that the poverty levels endured by more than one in three disabled Americans (N.O.D. 1998) are unconscionable. Unfortunately, in spite of some relative growth, the N.O.D. (1998) report indicates that, for students with disabilities, access to post secondary education and employment continues to fall substantially below the levels attained by their non disabled peers (Blackorby & Wagner, 1996; Phelps & Hanley-Maxwell, 1997; Wagner & Blackorby, 1996).

With the implementation of a strategic program of research, the National Center for the Study of Postsecondary Educational Supports (NCSPES) at the University of Hawaii at Manoa is focused upon a series of studies which address the discussed issues and barriers through the generation of new knowledge and understanding. The intent is that new findings and understandings will significantly impact upon the successful access, performance and completion of postsecondary education for persons with disabilities, resulting in increased, quality employment and community living.

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Discussion Paper

The Study of Postsecondary Educational Supports: A Formative Approach to an Emerging Area of Study

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Purpose

The purpose of this document is to introduce the emerging area of study surrounding the provision of educational supports to youth with disabilities in postsecondary programs. A further purpose is to establish a rationale for following a formative approach to the development of a strategic plan of research in this emerging area of study.

Introduction

Leadership within the nation's business and education communities has long pointed to the need for highly educated skilled workers as the nation seeks to succeed in the competitive global economy. Postsecondary education has been described as "America's traditional gateway to the professions, more challenging jobs, and higher wages" (U.S. Department of Education Strategic Plan, 1998-2000).

Over the last twenty years changes in the nation's labor market have increased the importance of possessing a postsecondary education in order to be able to compete in the job market. Whether it is college, adult and continuing education, or technical preparation, postsecondary education plays a major role in preparing persons for employment and career opportunities. Students who continue their education after high school maximize their preparedness for careers in today's changing economy as they learn the higher order thinking and technical skills necessary to take advantage of current and future job market trends. Yet, persons with disabilities have often experienced limited access to and success in postsecondary education programs, resulting in poor employment outcomes.

Statement of the Problem

Given the increasing need for persons with disabilities to be able to succeed in postsecondary education programs in order to be able to access and participate successfully in the work force, it is imperative that we understand present and future needs, emerging strategies, technologies and approaches to enhancing access, participation, and performance for persons with disabilities (Benz, Doren, & Yovanoff, 1998; Blackorby & Wagner, 1996; Gilson, 1996; Reis, Neu, & McGuire, 1997; Stoddard, 1998). Most of the nation's 3,000 postsecondary institutions offer support services to students with disabilities (Binkerhoff, Shaw, & McGuire, 1992; 1993; Bursuck & Rose, 1992; Pierangelo & Crane, 1997). Such services and supports may vary widely and may include: (1) individual academic accommodations; (2) adaptive equipment; case management and coordination with vocational rehabilitation, independent living, and other community resources; (4) advocacy; and (5) personal counseling, academic and career advising. Although, a wide array of supports and services are being used to accommodate the needs of students with disabilities, understanding which specific accommodations are appropriate and effective to the student and under what conditions they may be applied are unknown. Given that such disability-related services and supports are a relatively new addition to the postsecondary environment, there is a great need to assemble a strategic plan of research focused upon the study of postsecondary supports for students with disability. Currently, insufficient information exists regarding the availability and use of educational supports and how such supports might effect successful access and

performance within postsecondary educational and subsequent employment environments. Further, existing information is often piecemeal and unorganized (Gajar, 1998) making it difficult to draw conclusions or to propose policy, procedure, or practice recommendations

During the summer of 1998, the National Institute on Disability and Rehabilitation Research (NIDRR) developed a priority to study educational supports to increase access and improve outcomes for individuals with disabilities in postsecondary education programs. Four areas were identified for study (USDOE, CFDA 84-133B, June 23, 1998):

(1) Identify the nature and range of educational supports that are available to students with disabilities in postsecondary educational programs;

(2) Examine the contributions of technological advances to the effectiveness of student support systems at the postsecondary level;

(3) Investigate the effectiveness of educational supports in terms of educational outcomes and labor force participation; and

(4) Investigate the extent to which institutional supports extend to the employment environment, with a special emphasis on the needs of persons with severe disabilities.

In response to CFDA 84.133B, faculty and staff at the Center on Disability Studies at the University of Hawaii at Manoa conducted a comprehensive review of the literature focused within and across the four areas of study (Stodden, 1998; Stodden & Dowrick, 1998). The literature review further verified the assumption that research to date was preliminary in nature (Gajar, 1998), consisting of a number of scattered studies focused upon a singular type of support provision with a specific disability group (Brinkerhoff, Shaw, & McGuire, 1993; Tindel, et. al., 1998; Gartin, Rumrill, & Serebreni, 1996; Pfeiffer & Finn, 1997). For Study Areas 1 & 2, (nature and range of educational support provision and contribution of technological advances) the literature consisted of isolated studies and program descriptions, with little effort toward an organized review or synthesis of the information. When seeking to identify the nature and range of educational support provision, the need for an organized and comprehensive database, of national scope, became very apparent, to gain an understanding of the current status of this area of research.

Where researchers found a small number of descriptions of support programs, few studies had been conducted and little or no data was available concerning the effectiveness of such supports with students with disabilities. When reviewing Study Areas 3 and 4 (effectiveness as related to educational outcomes and labor force participation and the carryover of supports into employment settings), no data was available. Federally supported efforts to describe the role of postsecondary career placement services in support of students with disability (OSEP funded Postsecondary Education Demonstration projects) provided little information of an effectiveness and outcome nature.

The transition from secondary school to postsecondary education for students with disabilities has been found to be complex and challenging. The available literature indicates that differences between high school and postsecondary environments are more than cosmetic (Gajar, 1998). Students with disabilities graduating from high school move from a protective environment in which school personnel are legally responsible for identifying and providing appropriate services under the IDEA to an environment in which the students are expected to find and request specific accommodations under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA). Studies seeking to describe and compare the differences between high school expectations and supports and those found in postsecondary environments are non-existent.

Initial Response to the Problem

Following a comprehensive literature review of educational support provision in postsecondary settings, faculty and staff at the University of Hawaii at Manoa determined the need to initiate a formative, consumer directed approach to the development of a Strategic Program of Research for this field of study. The formative research process was focused upon obtaining a multidimensional picture of what was known and not known regarding students with disabilities and postsecondary educational programs. The approach involved the following attributes:

1. Structured discussions with critical stakeholders, including students with disabilities. Staff conducted a series of community discussion groups to obtain a grass roots perspective of the

issues concerning students with disabilities, those who teach and support them, and related agency personnel in postsecondary educational programs.

2. Assembled a diverse group of stakeholders and conducted a consumer vision crafting retreat. Rather than focusing only on issues and needs, the retreat sought to describe a "futuristic" and "desired vision" for students with disabilities, support providers, instructors, and other supporting agencies as they work together within an improved postsecondary school experience for students with disabilities for the 21st century.

To bring this vision to reality, researchers and stakeholders concluded that a strategic research program in this field of study must address a broad range of factors that influence the availability and effectiveness of educational supports in postsecondary environments. Grouping these factors into categories, they include: (1) individual person characteristics, (2) family/community/society, (3) rehabilitation system, (4) postsecondary institutional environment, and (5) labor force/workplace. Each of these factors has an impact upon supporting improved access, participation, and performance of students with disabilities in postsecondary educational programs.

Further, participating stakeholders shared the vision of educational support provision as an individualized and flexible process that followed the needs of students with disabilities as they struggled to meet the requirements of postseondary school programs. The role and value of self-determination and self-advocacy skills, as well as supports for active student participation in all aspects of postsecondary education, were deemed significant by participants. As a result of these initial activities, it was apparent that a flexible and formative approach to this emerging field of research was critical to ensure results which would truly impact and improve the access, participation, and performance of students with disabilities in postsecondary educational programs and subsequent employment settings.

Design of Research Activities: PHASE I

The purpose of our Phase I Research Plan is to review and characterize the field of postsecondary educational supports as never before. This characterization of current issues and concerns establishes the platform on which to build intervention and policy research (Phase II), replication and evaluation (Phase III), and concurrent training. Without the successful outcomes of Phase I, intervention research would be premature—essentially shots in the dark. As noted in our premises below, the field is too new and scattered for there to exist accurately comprehensive and current reviews upon which to build an extensive program. The need for a "Phase I" is evident any new national center, emphasized in our case by the recent emergence of postsecondary educational supports as a specific field of study and program development.

The whole program of research, even beyond Phase I, is formative, given the state of the knowledge base (see Stodden & Dowrick, 1998, 1999). The program's focus is highly applied and attends to real problems in settings in which people live their daily lives. The current and proposed research activities derive from our 1998 consumer-based focus groups and continuing review of existing research on postsecondary education supports. The Rehabilitation Research and Training Center (RRTC) is implementing a participatory, sustained research program to enable projections of the future of postsecondary education for people with disabilities in the context of current practices and policies. The research program will provide the basis for improved futures for adults with disabilities in education and the labor market.

Our first premise is:

- postsecondary students with disabilities, given appropriate accommodations, can achieve challenging educational and work force outcomes comparable to their non-disabled peers.

The following premises, originally based on our information in 1998, have shaped the Phase I methodologies of our research activities:

- no comprehensive inventory exists on the nature and range of educational supports used with people with disabilities in postsecondary programs;
- further investigation is necessary to determine the extent to which educational supports have been developed and are effective in contributing to positive educational and subsequent workforce outcomes of individuals with disabilities;
- numerous individual, societal, family, and

system factors contribute to the success of people with disabilities in higher education and subsequent work force settings;

- research in the area of educational supports must be planned, developed and implemented from the perspectives of all consumers involved in supporting people with disabilities in postsecondary education, including people with disabilities, family members, secondary school educators/counselors, educational support personnel, employers, and rehabilitation personnel; success in the provision of educational supports must be assessed by multiple measures that include the perspective of the recipient of the support services.

The methodology emphasizes Participatory Action Research (PAR; see accompanying report)—without being bound by it—to maximize consumer involvement without compromising scientific rigor. We have four research goals, corresponding to the RRTC's four Areas of Study as required by the funding agency:

Goal I: a) To identify the nature and range of educational supports, including (1) individual academic accommodations, (2) adaptive equipment, (3) case management and coordination, (4) advocacy, and (5) personal counseling and career advising, for a) people with disabilities (different types) within postsecondary programs (universities, community colleges, vocational technical programs, and other community based program); and b) to determine what factors influence provision and adoption of these supports.

Goal II: a) To identify technologies that improve postsecondary outcomes for students with disabilities; b) to identify factors that impede the provision and the adoption of these technologies; and c) to explore policy and practice solutions to overcoming these barriers.

Goal III: a) To identify effective supports and models of support delivery that contribute to improved outcomes for students with disabilities, measured by successful access and performance in postsecondary programs, ability to attain employment, and personal satisfaction; and b) to analyze the factors contributing to the effectiveness of such supports.

Goal IV: To investigate methods by which the supports in postsecondary programs can be extended to the employment environment.

The Conceptual Framework (see accompanying report) guiding the strategic program of research for this RRTC is operationalized in three phases of activity as illustrated in the attached Figure 1 and described below.

Phase I: Synthesis and Development - Review of Emerging Research and Design Validation

The purpose of the first phase of activity is to characterize what is known and to identify critical gaps in knowledge and practice. The culmination of this phase is to bring its results to a National Review Forum (see below), and to have that forum recommend adoption and adaptation of the most important topics for Phases II and III.

There are three general methodologies and a total of six specific methodologies that contribute to Phase I (and will continue to contribute throughout subsequent phases). These methodologies complement one another by characterizing fresh perspectives on:

(a) the academic knowledge-base and viewpoints of researchers;

(b) institutional practices and viewpoints of student support providers;

(c) special supports and viewpoints of students and graduates.

Brief synopses of the methodologies are listed below. More details, in brief but comprehensive summaries (4-10 pgs), are provided in accompanying reports.

Participatory Action Teams, composed of Consortium and Study Area investigators, people with disabilities, and other consumers, have provided perspectives across all methodologies in the four areas of study. For all methodologies, we have put systems in place that can continue to update this evolving field. Consortium site investigators working with Participatory Action Teams are bringing to the Forum some consensus on potentially useful research-based practices and strategies, critical gaps and issues in proven practice, and other significant variables that may influence further research.

First General Methodology: the academic knowledge-base and viewpoints of researchers

This methodology attempts the comprehensive collection and analysis of journal articles, books, videos, manuals, reports, etc. Lists are compiled and information is made available to other researchers. Selectively, reviews are made and positions are taken on the potential of new developments. This methodology contributes to all four areas of study, in proportion to the amount of information available.

1. Extension and Annotation of the Research Database. The development of reviews and position papers (see below) are necessarily based on a thorough search of literature and investigations of practices, works in progress, and other unpublished information. Comprehensively searching all areas of study, we have built a specialized database (nearly 200 items) of references to articles, books, videos, manuals, reports, etc., and made it available on the world wide web (www.rrtc.hawaii.edu/research/). Our first line of support to other programs is through this web database. We have written annotations to most of these items. Print copies of lists are available.

2. Analyses of Research within Study Areas. Investigator teams are developing research syntheses (review papers and position papers) within and across the four areas of study. This process provides critical information for framing questions for field studies during Phase II of the strategic program of research. Approximately 15 of these analysis papers have been written—some published or submitted for publication, some in draft. As with all the methodology outcomes, summaries are made available to all Forum participants (beforehand) and full papers will be available at the National Review Forum.

Second General Methodology: institutional practices, viewpoints of student support providers

This methodology attempts to develop a comprehensive picture of what is happening nationally. We are interested in regional and cultural differences. We have sought to find who thinks they are doing a good job and who is not. This methodology contributes most substantially to Area I (the nature and scope of supports), with some lesser but useful baseline information in the other three areas.

3. National Survey of Current Practices. Consortium researchers and PATs have worked with local student services and the Association for Higher Education And Disabilities (AHEAD) to develop and implement a national survey of the current status of educational supports in postsecondary programs. Approximately one third of 2200 surveys were returned, with good distribution across regions and types of program (4 year plus, 2 year, less than 2 year, public and private programs).

4. In-Depth Program Descriptions. Because of the individuality of supports, often provided only to students who declare their disability status, a national survey will only partly capture the picture of support provision. Therefore, we have begun to examine selected promising practices, to be characterized in program descriptions that can serve as models, as well as potentially revealing types of supports for further research.

Third General Methodology: special supports and viewpoints of students and graduates

This methodology attempts to bring to light interesting (researchable) facts about specific supports or their circumstances, that would not surface in the more general methods of surveys or program descriptions. It is also a further effort to give voice to the student-consumer. We originally envisioned the PAR approach to provide sufficient consumer input. But we later considered the value of additional interest and validity that could come from individual stories. Thus these processes have been added to our program since the original proposal and its acceptance for funding. They add to Areas II, III, and IV, more than to Area I—and most especially to Area III (Effectiveness), in which we have the least information from the other methodologies.

5. Individual Case Reports. We originally planned to use the recognized Promising Programs to identify some individuals within those programs for case studies. Because these programs are better recognized in the context of the National Survey, our search for them was delayed until the survey began returning its results. Therefore, we decided to identify and write up retrospective case reports, with the students

being written about having significant say in the article. The protocol and examples are posted on our website, partly to encourage others outside the RRTC to contribute further reports. Six reports (maybe more, new ones are arriving every week), have been summarized for the Forum.

6. Focus Groups. Another addition, beyond the original proposal, to the types of research that give consumers' perspectives, has been student-oriented focus groups. At first we planned four, one at each of the Consortium sites. Then we were given impetus to add six geographically diverse sites, as part of an initiative by the Presidential Task Force on the Employment of Adults with Disabilities. Groups have been designed to give additional voice to underrepresented disability and ethnic participants. The data add further grist to the mill of future policy, finance, and utilization studies.

National Design Forum

The culmination of these efforts was scheduled to take place in March 2000, at our National Review Forum—for which this document is part of the preparatory papers. More than 20 experts and consumers have accepted the invitation to participate for 2 days in the review of Phase 1 findings and to assist the reconsideration of projected study areas to be pursued in subsequent years. The purpose of the Forum will be to review the overall synthesis and all its components, validate the influence of contributing factors, and identify critical topics within and across the four areas of study.

Forum participants will also provide input into Dissemination (e.g., formats and audiences for a series of research-to-practice briefs), the most important content for Training, and recommended methods of Technical Assistance, etc.

Phase II: Implementation of a Strategic Research Plan

In Years 2-5, we will conduct a series of studies in Intervention, Demonstration, Policy Analysis, etc. in Study Areas II, III, and IV. At the Forum, the topics of projected studies will be reconsidered, as indicated above. The design of all studies will be reconsidered after the Forum by the Consortium researchers, in the light of all information and Forum activities.

Examples of the types of probable studies based on 1998 knowledge are described in the original proposal. For example, we proposed sample studies of how the role or voice of the "person" can be enhanced by the use of various technologies; if and how technological support carries over from postsecondary education to the workplace; and ethnographic approaches to the effectiveness of supports. Thus the research teams will work closely together, sometimes to combine Areas of Study, and sometimes to collaborate across the nation. While the University of Hawaii takes the main responsibility, some of the studies will be led by a Consortium member team - for example, the Virginia team might lead an investigation of comprehensive career planning and employment outcomes, because of their experience in this area.

Phase III: Continued Implementation and Evaluation

During Years 4 and 5, interventions that have shown educational support value or effectiveness could be replicated in other postsecondary settings. Consortium member programs and Collaborating Research Programs would serve as sites for replication of effective interventions. Several collaborating programs have been identified because of special cultural or geographic conditions. Data from the longitudinal nation survey and replication of interventions would ensure the generalizability of effectiveness across different contexts and postsecondary program types. During Years 4 and 5 of the RRTC, attention is expected to be focused upon analysis of longitudinal data measuring the ongoing impact of educational support provision and the relationship of that impact to subsequent participation in the work force (see potential studies outlined in the original proposal).

An important part of the strategic plan of research during Years 3-5 is an evaluation of research findings generated over the first years of the RRTC. This analysis will seek to determine the value of one set of data set in relation to others, which might give new insight into the findings.

Maintaining Rigor in Participatory Action Research

The RRTC is conceptually designed to be consumer-driven and therefore, research activities are conducted within a participatory action research (PAR) framework that maximizes the participation of consumers. PAR has been increasingly used to give

voice to marginalized peoples since its early demonstration with minority communities by Lewin (1946). The primary goals are to increase the relevance of research through consumer involvement and to empower individuals to construct and use knowledge to enhance their own lives (Whyte, 1991). The use of PAR provides for a coherent and sustained approach that guides all RRTC research activities. The benefits of this approach, as opposed to researcher-driven approaches (based on Bruyere, 1993; NIDRR, 1997; White Nary. T Froehlich in press) include:

- increased relevance and validity of research due to greater consumer involvement in identifying and prioritizing research questions and constructs;
- more efficient sample recruitment process because potential subjects perceive personal relevance and benefit;
- increased acceptance and use of the research product by consumers because of greater relevance to their self-identified needs;
- more positive impacts on the service system because PAR's "action" orientation fosters the immediate practical application of research results (rather than simply presenting the results for others to figure out how they might be applied);
- enhanced generation of new research ideas and alternative interpretations of results through consumer input based on personal ground-level experience; and
- greater scope and reach of dissemination as consumers inform each other of research results and products, which they have helped to produce.

All RRTC research activities employ the PAR approach, building upon past experiences of Center on Disability Studies staff and backed by published guidelines (e.g., NIDRR, 1997; Whyte, 1991), PAR supports qualitative research, since the personal experiences of properly qualified and trained consumers may give them an advantage over non-consumers in performing such research tasks as developing valid and relevant interview questions, conducting interviews, and coding interview responses. PAR is also applicable to quantitative research, since consumers can make important contributions to defining the research problem, identifying relevant variables to manipulate or control, interpreting the data collected, and disseminating research products (Lane & Mann, summarized in NDRR, 1997).

The PAR provides coherence to the research activities, contributing equally to the knowledge-base synthesis, the survey, program descriptions, and case studies, which in turn lead to experiments, demonstrations, and policy studies. Our RRTC project has also adopted the PAR process and principles in support of training, technical assistance, and dissemination activities. Thus we have established Participating Action Teams (Pats) to provide input on all project activities at each project site. Also PAT members are involved in research activities as well as training, TA and dissemination activities of the project.

This paper presents and discusses a model for participating action research and relates it to a case illustration at a series of focus groups that were conducted by our RRTC project. Participants in the focus groups were students with disabilities. They were involved in all phases of the research. The focus group participants worked with researchers in choosing focus groups as an appropriate method for the goals and objectives they helped design. The questions for each site. This ensured that the questions would address their concerns and would be meaningful to the community. Participant review was used during the analysis process to assist researches to interpret qualitative data that was generated by the focus group discussion. Finally, focus group participants will help inform the dissemination and application of the study's findings in both continuing research and practice.

A Model for Participatory Action Research

The research process is influenced by both external and internal consumer involvements. Specifically, this PAR model is composed of four main components: 1) external consumer influences, 2) internal consumer influences through the Pats, 3) the research process, and 4) consumer-valued outcomes. Each of these components is presented in more detail below.

External Consumer Influence

The influence of consumers' needs is often substantial even before a related research project is begun. There has been a trend among policy makers and research funders, such as the National Institute on Disability and Rehabilitation Research (NIDRR), to develop PAR priorities.

Policy makers. Policy makers are often petitioned by special interest groups and individuals regarding hundreds of issues. The issues often represent ideas that may not even be on the policy maker's "radar screen". One consumer activist group, ADAPT (American disabled for Attendant Programs Today) has used tactics to make their calls for change in policy widely publicized. ADAPT's campaign for accessible public transit began in Denver in 1983 and spawned 7 years of demonstrations in cities across the U.S.. At those demonstrations wheelchair users blocked buses by chaining their wheelchairs to them. As a result, ADAPT was in a position to influence stringent requirements regarding public transit in the legislation of the Americans with Disabilities Act 1990.

Research Funders. Funding agencies often solicit input when establishing research initiatives. Frequently the feedback generated comes from professionals who wish to conduct research in the area. NIDRR is one such agency. Their consumer approach has three components. First, they invite knowledgeable consumers, advocates, and family members to help identify real-world problems that need to be addressed through research. Second, in The Federal Register , they release "calls for public comment" on research priorities that they will incorporate in future grant competitions. Third, NIDRR involves people with disabilities and those from minority cultures on its peer view panels for various grant competitions.

Consumer Empowered Team

What White (1995) refers to is Participatory Action Team equivalent to our PAT. It consists of consumer-consultants, advocate leaders, project and disability agency personnel and researchers. The team is much closer to research activities than the usual consumer advisory board. Its purpose is to solicit consumer input throughout the research process. Consultations may range from interviewing key informants regarding policy issues, to developing contracts with subject matter experts to assist in producing specific research or training materials. Each project assembles its own team based on the particular project needs, goals, and intended outcomes.

Team members frame the research issue from a consumer viewpoint, identify possible root causes of why the problem occurs, under what conditions, and with what consequences. Fawcett (1991) suggest this PAR process enhances the quality of the research process through assessing the social significance of the research goals; the appropriateness of the research procedures; and the social importance of the effects of the intervention.

Now in the Hawaii RRTC, PATs have been established program-wide as well as for each individual research enterprise – survey, focus groups, and so on.

The Research Process

The process starts with formulating the research question. To answer this question, the research goals are developed, as are the procedures and methods. The generated data are then analyzed to identify the results. Finally, the results and intervention package, as applicable, are disseminated to targeted audiences. Each of these research elements and how they are influenced through this iterative participatory research process are discussed in more detail below.

Formulate research questions. The team reviews and helps shape the research question within the priorities identified by the funding agency. This participation helps ensure that the research will be more relevant to its intended audiences. For example, in the RRTC focus group activity consumers are involved in both generating initial research questions and in applying these research questions to the needs and conditions in each of the ten national sites.

Prioritize concerns and develop goals. Within the direction of the research, the consumers' disability concerns are to be prioritized and goals developed to address those concerns. The team shapes the relevance of the concerns and goals, based on their personal experiences. To provide direction for our research, we used input from consumers and professionals to identify critical topic areas.

Shape procedures and methods. Researchers adopt specific approaches to address research questions or problems. We desire to develop research interventions and outcomes, which can survive in the natural community setting over time. The approach teaches us valuable lessons about the delicate balance between research rigor and relevance. Rigorous research builds better science when it is relevant to those to whom it is directed. (Rogers & Palmer-Erbs, 1994).

For example, in the Focus groups, rather than be confined to a standard set of questions for all ten sites, we incorporated PAR methods to generate variations in questions relevant to each site.

Results. Traditional research results describe the effects of independent variables on targeted dependent variables and how this evidence contributes to existing knowledge. The main emphasis is whether the results demonstrate a functional relationship between the independent and dependent variables. In the PAR approach, the team augments the scientific interpretation of the results by challenging researchers to examine the practical meaning and impact the results can have for whom the intervention was targeted. Consumer-collaborators have little enthusiasm for research results that produce significant statistical effects, but have virtually no real-life application. Greenwood et al. (1993 state that this involvement in the research process is "capable of producing both scientifically and socially meaningful research results" (p. 180). To this end each RRTC focus group site involves the consumer participants by sending them the preliminary results for their review and comments.

Dissemination. Consumer collaboration in the dissemination process can shape the products that flow from the research as well as the best formats (e.g., audiotape, Braille, large print, www, etc.) to promote maximum use by intended users. Consumer collaborators who are partners in the research process can be valuable champions in approaching new target audiences for the particular intervention or resulting research products. RRTC consumers involved in the focus groups have provided invaluable suggestions in getting this information out to broader audiences. In addition, the PATs are involved in developing dissemination plans and in some cases the development of the research products.

Consumer Participation. Consumers can also provide realistic input regarding products through their perspective of the social importance of the outcomes, the ease of implementation, and whether outcomes improve some aspect of the consumers' quality of life. Each of these values is briefly discussed.

Social importance. Wolf (1978) and Fawcett (1991) have described the importance of consumer "social validation" of research goals and procedures. These authors further suggest that consumer input is also relevant in determining the social importance of the effects of the research intervention and how relevant it is to their lives.

Ease of implementation. Consumers can provide a perspective that researchers, who are "on the outside" do not have about developing interventions that can be easily implemented by consumers. After the research phase has been conducted, emphasis should be placed on technology transfer from the researcher to the consumer (Brandt & Pope, 1997).

Quality of life. Quality of life is an important issue to consumers who are evaluating research interventions and proposed products. Consumers input is needed throughout the research process to increase the likelihood that research outcomes enhance consumers' quality of life.

NOTE

Selected excerpts of the description of the PAR/PAT process are from a paper titled Consumers as Collaborators in Research and Action written by G.W. White, D.E. Nary and A.K. Froehlich from the Research and Training Center in Independent Living and the Department of Human Development and Family Life at the University of Kansas. The primary author is a member of the National Advisory Board of our National Center on Post Secondary Supports and Services.

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Presenter: David Johnson

Topic: Challenges Facing the Future of Secondary Education and Transition Services: Implications for Preparing Youth with Disabilities for Postsecondary Education

Discussion Questions:

1. What strategies must be undertaken to ensure that students with disabilities access the full range of secondary education curricular options and learning experiences (eg., general education curricular options, vocational education, alternative education, community-based work experiences, service learning, others) in meeting state and local district educational standards and requirements for graduation?

2. What strategies should secondary education undertake to improve students' access to and successful participation in postsecondary education?

3. What strategies need to be developed to help state and local education agencies in meeting the transition service requirements of IDEA 97?

Related Implication Briefs: Studies 1, 2, 4, 5, 6, 7, 9, 12, 13, & 14

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Discussion Paper

Current Challenges Facing the Future of Secondary Education and Transition Services for Youth with Disabilities in the United States

David R. Johnson, Ph.D.

This paper is intended to promote discussion among professionals, policymakers, employers, parents, and individuals with disabilities concerning the current and future challenges facing secondary education and transition services nationally. The issues identified and discussed should not, however, be viewed as inclusive of the full range of possible challenges that need to be addressed. This paper: (a) presents findings from research that identifies key issues influencing the implementation of the federal transition requirements of the Individuals with Disabilities Education Act (IDEA) Amendments of 1997 and policies at the state and local levels; (b) examines the impact and implications of recent general education reform initiatives on secondary education and transition services; and (c) presents the major policy, system and other challenges that the Center must begin to address immediately. These challenges have broad implications for special education and its relationship with general education and a wide range of community agencies and organizations responsible for supporting youth with disabilities as they make the transition from high school to postsecondary education, employment, independent living options, lifelong learning, and other aspects of adult life.

National Perspective on Transition and Youth with Disabilities

Since the mid-1980s, the US Department of Education, Office of Special Education and Rehabilitative Services (OSERS), has stressed the importance of improving transition services nationally. The federal government has assumed a crucial role in stimulating state and local efforts to improve transition services through a variety of policy, interagency, systems change, model demonstration, and research efforts. Specific language on transition was included in the IDEA of 1990, and again in the IDEA Amendments of 1997. From this federal legislation, regulations were established requiring state and local education agencies specifically to address the school and post-school transition service needs of students with disabilities. These needs would be met through coordinated planning among special education and parents and students, general education, and community service agencies.

Much of the rationale for establishing these new provisions was based on the recognition that many young adults with disabilities were exiting high school unprepared for adult life. Follow-up studies conducted on former special education students during the past two decades have consistently documented the limited outcomes achieved by young adults with disabilities as they leave school and attempt to access employment, postsecondary education programs, and adult community services (DeStefano & Wagner, 1991; Halpern, 1990; Hasazi, Gordon, & Roe, 1985; Johnson, McGrew, Bloomberg, Bruininks, & Lin, 1997; Wagner, 1993). Predominant themes emerging from the findings of these and other studies included lower than desired academic achievement levels; high dropout rates; substantial levels of unemployment and underemployment; economic instability, dependence, and social isolation; and low levels of participation in postsecondary education and training programs. The transition services requirements of the IDEA of 1990 and the IDEA Amendments of 1997 were established for the specific purpose of addressing these and other difficulties that youth with disabilities experience as they attempt to prepare for and make the transition to adult life.

For nearly two decades, the Office of Special

Education Programs (OSEP) has sponsored transition research, demonstration, and training initiatives that have resulted in a knowledge-base of essential and promising approaches and strategies for the delivery of transition services for students with disabilities. Advances and innovations in interagency cooperation, access to postsecondary education and training, supported employment, transition planning, student and parental involvement in school and post-school decision making, development of adult living skills, self determination and self advocacy, and the like, are all valued examples of previous and current efforts. These varied approaches and strategies serve as the foundation upon which state and local education agencies, in partnership with community service agencies, parents, and students have based the development of their transition programs and services.

Emergent Policy Influences on the Provision of Secondary Education and Transition Services

Since the mid-1980s, the efficacy of public education programs has been challenged by policymakers, business leaders, professionals, and the general public. Whether the impetus for reform comes from a perception of "falling behind" our international counterparts (as asserted in A Nation at Risk), not producing youth prepared for the labor market (as in the SCANS report), or "falling short" of providing equitable opportunities to all U.S. children (as in The Forgotten Half), the consensus seems to be that there are serious things wrong with public education, that the problems are systemic rather than programmatic, and that nothing short of major structural change will fix these problems (Cobb & Johnson, 1997; Thurlow & Johnson, 2000). While these concerns initially focused on improving general education, there are now efforts to closely align special programs with emerging general education reforms (e.g., Testing, Teaching and Learning, Elmore & Rothman, 1999; Educating One and All, McDonnell, McLaughlin, & Morison, 1997). Special education programs have been influenced by several recent federal and state education reforms, including the School to Work Opportunities Act of 1994, Goals 2000: Educate America Act of 1994, and the Improving America's Schools Act of 1994, all of which have promoted comprehensive strategies for improving public school programs for all students, including those from diverse, multicultural backgrounds and situations of poverty. These reforms stress high academic and occupational standards; promote the use of state and local standards-based accountability systems; point to the need to improve teaching through comprehensive professional development programs; and call for broad-based partnerships between schools, employers, postsecondary institutions, parents, and others

With the reauthorization of IDEA, significant new requirements were put into place to ensure students greater access to the general education curriculum and assessment systems. IDEA 97 also expanded previous transition requirements by requiring that the individualized education program (IEP) include, at age 14 or earlier, a statement of transition service needs that focus on the student's courses of study (such as participation in advanced-placement courses or vocational education programs). The IEP must also include, beginning at age 16 or younger, a statement of needed transition services and interagency responsibilities or any needed linkages.

The current challenge is to integrate and align these transition requirements with other IDEA 97 requirements that give students with disabilities greater access to the general education curriculum and assessment systems. Several recent studies indicate that the implementation of transition service requirements has been too slow, with many states failing to achieve minimal levels of compliance (Hasazi, Furney, & DeStefano, 1999; Johnson & Sharpe, 2000; National Council on Disability, 2000). Areas of greatest noncompliance include having appropriate participants in IEP meetings, providing adequate notice of meetings, and providing a statement of needed services in students' IEPs. These problems have been complicated further by state and local standards-based assessment systems that either fail to include students with disabilities or provide inadequate accommodations that support their participation.

Students with disabilities also have trouble in meeting graduation requirements, and concerns are mounting about the relationship between students' academic experiences and the formulation of post-school transition plans that address how students will access postsecondary education, employment, and community living opportunities (Guy, Hyeonsook, Lee, & Thurlow, 1999; Johnson, Sharpe, & Stodden, 2000; Policy Information Clearinghouse, 1997; Stodden & Dowrick, 2000). Limited levels of service coordination and collaboration among schools and community service agencies create difficulties for students with disabilities and families in achieving post-school results. Strategies are desperately needed to help state and local education agencies and community

service agencies address the transition service requirements as students access the general curriculum and meet state standards and graduation requirements.

Current and Future Challenges Impacting Secondary Education and Transition Services

Challenge 1: Ensure students with disabilities access to the full range of secondary education curricular options and learning experiences

IDEA 97 provides many students with disabilities new opportunities to participate in and benefit from a wide array of general education courses and learning experiences. A major goal of accessing the general education curriculum is to prepare students to earn a diploma and help prepare them for adult life (Policy Information Clearinghouse, 1997; U.S. Dept. of Education, 1999). Although the general education curriculum contains both academic (e.g., math, science) and nonacademic (e.g., career education, arts, citizenship) domains, student performance is assessed primarily in academics. As a result, it is not uncommon for portions of the general curriculum as well as transition goals to receive limited or no attention (Hasazi et al., 1999; Warren, 1997). There also may result a narrowing of curriculum and instruction to focus on content assessed in state or local tests and limits on the range of program options for students, due to intensified efforts to concentrate on areas of weakness identified by testing (Education Commission of the States, 1998; Lane, Park, & Stone, 1998; Nelson, 1999; Thurlow & Johnson, 2000). Efforts must be undertaken to ensure that students with disabilities, remain on a full "curriculum" track, with learning expectations that guide the instruction of general education students. IEP teams must work to ensure that high expectations are maintained and students are afforded opportunities to develop skills through a wide range of curriculum options, including vocational education, service learning, community work experience, and adult living skills (Hasazi et al., 1999; Johnson, et al., 2000).

Access to the general education curriculum requires more than common standards, the integration of academic and applied learning, and universal design. It also depends on other factors, such as the knowledge and skill levels of educators, appropriate instructional materials and strategies (Boudah, Schumaker, & Deshler, 1997; Carnine, 1995; Kameenui & Carnine, 1994; Tralli, Colombo, Deshler, & Schumaker, 1999), use of accommodations during instruction and testing (Elliott & Thurlow, 2000; Thurlow et al. 1998; Thurlow, House, Scott & Ysseldyke, 2000), and collaboration between general education and special education personnel in designing educational programs for students with disabilities (Knight, 1998; Lenz & Scanlon, 1998

There is a critical need to develop assessment, curriculum, and instructional strategies that are relevant to all students (including those who dropout and have significant learning needs), allowing them to successfully achieve state and local standards, as well as to develop other essential adult life skills through vocational education, training in adult living skills, community participation, and others. Strategies such as "universal design" offer another approach to ensuring that students with disabilities access the full range of learning opportunities in the secondary education curriculum (Jorgensen, 1997; Orkis & McLane, 1998; Rose & Meyer, 1996). Secondary education and transition models are also needed that integrate academic, career, work-based, service learning, and other learning experiences. Such models must be created to address the needs of *all* students, including those with disabilities and other at-risk characteristics.

Students' IEPs must focus on the broadest range of curricula and programs that support students with disabilities in successfully achieving state academic and related standards, as well as developing essential adult-life skills. In addition to the academic focus of the general education curriculum, several additional high school curricular options include:

- **Community-Based Work Experience:** This type of program offers structured, part-time, paid and unpaid opportunities in which students can participate and earn high-school credit.

- **Vocational Education:** Programs of vocational education include vocational courses, paid work experiences, participation in student organizations, and other learning experiences. Increasingly efforts are underway to integrate academic learning with vocational education programs.

- **Dropout Reentry Programs:** These programs are designed for students who have dropped out of school and want to return and complete their high

school diploma. These programs typically emphasize a strong base of classroom, as well as experiential, learning, including paid work experiences.

- **Independent Living Skills Programs:** Programs specifically designed to help students to develop daily living skills necessary for living independently in the community. Such programs can be coordinated with local centers for independent living.

- **Tech Prep Programs:** The tech-prep educational path combines math, science, and communication with a strong technical core. Beginning in eleventh grade, tech prep education is a four-year sequence of study that continues into at least two years of postsecondary vocational/technical education.

- **Service Learning Opportunities:** These programs combine experiential education and curricular goals to help students develop skills and knowledge concerning community service/human service career options. Students earn high school credits for graduation in these programs.

- **Postsecondary Education Options:** These programs, offered in several states, allow students, typically in the eleventh and twelfth grades, to take classes at public or private postsecondary institutions, under the guidance of their high school teachers/counselors.

Challenge 2: Make high school graduation decisions based on meaningful indicators of students' learning and skills and clarify the implications of different diploma options for students with disabilities

Requirements that states set for graduation can range from Carnegie unit requirements (a certain number of class credits earned in specific areas), successfully passing a competency test, high school exit exams, and/or a series of benchmark exams (Thurlow, Ysseldyke, & Anderson, 1995). States may also require almost any combination of these. Diversity in graduation requirements is complicated further by an increasingly diverse set of possible diploma options. In addition the standard high school diploma, options include special education diplomas, certificates of completion, occupational diplomas, and others.

Many states have gone all out to improve the passing rates of students with disabilities on state exit exams and in meeting other requirements for graduation. Strategies have included grade-level retention, specialized tutoring and instruction during the school day and after school, and weekend and summer tutoring programs. While these may be viewed as appropriate interventions and strategies, there is little research evidence to suggest that this is the case. Persuasive evidence indicates, for example, that repeating a grade does not improve the overall achievement of students with disabilities (Allington & McGill-Franzen, 1992; Holmes, 1989).

A second concern arises for students who become frustrated at repeated failures on state graduation tests and drop out of school. Dropping out of school is one of the most serious and pervasive problems facing special education programs nationally, yet very little data are presently available on dropout rates among youth with disabilities. The last study of the secondary school experiences of students with disabilities that was mandated by the US Congress found that approximately 36% exited school by dropping out (Wagner, Newman, D'Amico, Jay, Butler-Naylin, Marder, & Cox, 1991). No studies to date have been conducted to examine the relationship between "high-stakes" assessment practices and related graduation requirements on dropout rates for students with disabilities.

There is a critical need to better understand the implications of state graduation requirements, considering the potential negative outcomes students experience when they fail to meet state standards for graduation. There are several challenges that must be addressed in relation to state graduation requirements and the granting of alternative diplomas for students with disabilities. Several of these include the need to:

- **Promote the use of alternate assessments to support graduation decisions.** In addition to meeting state course requirements and/or passing exit examinations, other relevant, multiple sources

of information and documentation of student knowledge and skills should be used in making graduation decisions and the granting of diploma options. While alternate assessments are being used by some states as a way for some students to show that they have met graduation requirements, these really don't provide the multiple sources of information needed. Other possible sources might include authentic or performances based assessments, portfolios, or other documentation.

- Clarify the implications of developing and granting alternative diploma options for students with disabilities. The question here is whether receiving less than a standard high school diploma may limit a student's access to future postsecondary education and employment opportunities. Currently, most states offer and grant alternative diplomas in addition to the standard high school diploma (Guy, Shin, Lee, & Thurlow, 1999). State and local education agencies need to thoroughly discuss the "meaning" and "rigor" of these alternative diplomas with, at a minimum, postsecondary education program representatives and employers. Consensus must be reached on their use for postsecondary education admissions and in making hiring decisions.

- Clarify the implications of different diploma options for continued special education services. It is important for parents and educators to know that if a student graduates from high school with a standard high school diploma, the student is no longer entitled to special education services unless a state or district has a policy about continued services under such circumstances. Most states, however, do not have such policies. Special education and general education teachers should carefully work with students and families to consider what it actually means to receive a high school diploma. In some cases, it may be advisable to delay formal receipt of a standard high school diploma until the conditions (goals and objectives) of the student's IEP have been fully met, including all transition service requirements outlined in IDEA 1997.

Challenge 3: Ensure students access to and full participation in postsecondary education, employment, and independent living opportunities

Young adults with disabilities still face significant difficulties in securing jobs, accessing postsecondary education, living independently, and fully participating in their communities. With the passage of recent federal legislation (PL 101-336 & PL 105-17) has come an expanding social awareness of accessibility and disability issues surrounding youth with disabilities seeking access to postsecondary education, life long learning and employment (Benz, Doren & Yovanoff, 1998; Stodden, 1998). The number of youth in postsecondary schools reporting a disability has increased dramatically, climbing from 2.6% in 1978, to 9.2% in 1994, to nearly 19% in 1996 (Blackorby & Wagner, 1996; Gajar, 1992, 1998; Wagner & Blackorby, 1996).

Since 1990 there has been a 90% increase in the number of colleges/universities, community colleges and vocational technical centers offering opportunities for persons with disabilities to continue their education (Pierangelo & Crane, 1997). Despite this increase in available services, the enrollment of people with disabilities in postsecondary education programs is still 50% lower than the general population. These gaps in educational attainment persist into adult employment (Benz et al., 1998; Blackorby & Wagner, 1996; Gilson, 1996), and are greater with less educational attainment (U.S. Bureau of Census, 1996). Only 15.6% of persons with disabilities with less than a high school diploma participate in today's labor force; the rate doubles to 30.2% for those who have completed high school, triples to 45.1% for those with some postsecondary education, and climbs to 50.3% for disabled persons with at least four years of college (Reskin & Roos, 1990; Yelin & Katz, 1994a, 1994b).

The National Center for the Study of Postsecondary Educational Supports (NCSPES), a Rehabilitation, Research and Training Center funded at the University of Hawaii at Manoa, has conducted an extensive program of research focused upon the access, participation, and success of youth with disabilities in postsecondary education and subsequent employment. Phase I of the Strategic Program of Research included: (1) a review and systhesis of the literature regarding students with disabilities in postsecondary education, resulting in an annotated, searchable database of several hundred documents and more than 17 review papers; (2) a national survey of educational support provisions in postsecondary settings (NCSPES, 2000a); (3) a series of national focus groups of students with disabilities in postsecondary education (NCSPES, 2000b); and (4) a number of student-focused case descriptions sharing experiences in postsecondary education. Phase I

findings were further synthesized with the input of professionals and consumers (students with disabilities) at a National Research Forum held in Honolulu, Hawaii (Proceedings Summary Report, March 2000), and the National Transition Summit on Young People with Disabilities held in Washington, DC (Summary Report, June 2000).

In an effort to move research-based knowledge to practice, NCSPES sought to frame issues concerning students with disabilities and postsecondary education within the following four areas of intervention:

- **Process and content of preparation received by students with disabilities in lower education under the Individuals with Disabilities Education Act (IDEA).** Findings indicate that students need to understand themselves and their disability in relation to needed services and supports, with the ability to describe and advocate for those needs in different postschool educational and employment settings (NCSPES, 2000a).

- **Manner in which services and supports are made available and provided to students with disabilities in postsecondary programs.** Findings indicate the need for models of support provision that are personally responsive, flexible, and individualized, as well as coordinated with instruction and integrated with the overall life support needs of the student (NCSPES, 2000b; Stodden & Dowrick, 2000a).

- **Coordination and management of educational supports and services with the many other services and supports required by most students with disabilities in postsecondary education.** Most students with disabilities have a range of health, human service, transportation, and fiscal needs beyond the educational supports typically provided in postsecondary programs. A significant number of students with disabilities in postsecondary education require case management assistance or the skills, knowledge, and time to manage their own services and supports (NCSPES, 2000a; Stodden & Dowrick, 2000b).

- **Transition or transfer of educational supports from postsecondary settings to subsequent employment settings.** Many students with disabilities completing postsecondary education have difficulty finding subsequent employment in their profession of preparation. Most postsecondary institutions do not facilitate or provide assistance with the transfer of supports to the workplace (NCSPES, 2000a; *USA Today*, June 2000).

Another pressing challenge today is the participation of youth with disabilities in state and local work force development initiatives, such as the Workforce Investment Act (WIA) of 1998. WIA services for youth include: (1) establishment of local youth councils, (2) Youth Opportunity Grants that promote employment and training, (3) comprehensive career development services based on individualized assessment and planning, (4) youth connections and access to the one-stop career center system, and (5) performance accountability focused on employment. Strategies must be developed to ensure that youth with disabilities are included in WIA programs.

It is well understood that preparation for the transition from high school to postsecondary education, employment, and independent living must begin early, or at least by age 14. It is at this age that students' IEP teams must engage in discussions regarding the types of course work students will need, at a minimum, to be able to enroll in postsecondary education programs, the types of learning options and experiences students will need to develop basic work skills for employment, as well as skills needed for independent living. Specific levels of accommodations and supports a student will need to participate in these post-school environments must also be identified. Prior to the student's graduation from high school, it is the responsibility of the student's IEP team to identify and engage the responsible agencies, resources, and accommodations required for the student to successfully achieve positive adult life outcomes. All agencies responsible must:

- **Ensure that community service agency participation systematically occurs in the development of post-school transition plans.** Strategies such as formalizing agency responsibilities through interagency agreements or memorandums of understanding, and formalizing follow-up procedures and actions when agencies are unable to attend should be considered.

- **Engage in integrated service planning.** The IEP should be coordinated with the individualized service plans required under other federal and state programs (Title I of the Rehabilitation Act of

1973, Title XIX of the Social Security Act [Medicaid], Title XVI of the Social Security Act [Supplemental Security Income], and other federal programs).

- **Provide information to parents on essential health and income maintenance programs.** Information on the SSI program, including information on basic program eligibility, 18-year old benefit redeterminations, appeals processes, and use of the SSI work incentives in promoting employment outcomes must be readily accessible to professionals, parents, and students with disabilities. Special education personnel must play a major role in making such information available and assisting parents and students in accessing needed benefits.

- **Promote collaborative employer engagement.** Increased secondary and postsecondary work-based learning opportunities, and ultimately jobs, are predicated on available and willing employers. Vehicles are needed, such as intermediary linking entities, that convene and connect schools, service agencies and employers so as to maximize the important learning adjuncts that workplaces represent. Given multiple youth initiatives that typically exist in communities, it is expedient to engage employers through collaborative efforts that minimize the distinction between categories of youth.

- **Establish partnerships with workforce development entities.** The participation of youth and young adults with disabilities, family members, and special education and rehabilitation professionals in state and local workforce development initiatives should be promoted. This is critically important to ensure that initiatives such as the Workforce Investment Act's youth employment programs are fully accessible to individuals with disabilities as they pursue postsecondary education and employment opportunities.

Challenge 4: Support student and family participation

The importance of student participation has been reinforced by emerging practices in public schools emphasizing the core values of self-determination, personal choice, and shared responsibility. OSEP has played a major role in advancing a wide range of self-determination strategies through sponsored research and demonstration projects. The IDEA 1997 regulations are explicit and require that all special education students age 14 and older are to be invited to their IEP meetings when transition is being discussed. Recent studies have shown that many students are attending their IEP meetings (Hasazi et al., 1999; Johnson & Sharpe, 2000). There remains, however, a significant number who are not involved. This raises obvious concerns as to whether these students are not being extended opportunities for involvement, or are simply choosing not to attend. It is difficult, however, to imagine conditions under which students would not attend their IEP meetings other than by personal choice. Questions must also be raised as to how well prepared these young people feel to participate in and ultimately lead discussions concerning their goals.

Parent participation in IEP meetings has been required since the inception of the EHA of 1975. A large part of the discussion in the literature centers around the role of parents as participants in the development of their child's IEP. IDEA 1990 and the 1997 Amendments have also required that state and local education agencies notify parents and encourage their participation when the purpose of the meeting is the consideration of transition services. While existing policies have strongly encouraged the participation of parents, it is less clear how successful these strategies have been in creating "meaningful" and "valued" roles for parents. Because of the critical role that parents play in assisting their children in making the transition from school to adult life, additional attention must be given to establishing strategies and methods needed to actively engage them in discussions and decisions concerning school and post-school options. To improve student and parent participation, there is a need to:

- **Support students in the development of decision-making, communication, and self-advocacy skills necessary to assume a leadership role in their transition/IEP meetings.** Strategies may include offering classes specifically designed to enhance decision-making, efforts to promote self-determination and goal-setting throughout the curriculum, and sending information home to assist parents in preparing their child for participation. Students' goals for self-determination must also be clearly stated within IEPs. Resources should also be committed to large-scale technical assistance and dissemination efforts to ensure that elementary, middle, and high schools nationwide have ready access to relevant information, curricula, and

strategies to promote self-determination.

- **Increase the participation of parents, especially parents from diverse cultural backgrounds and those living in poverty.** Research has shown that parent participation in IEPs has generally been passive, principally due to parents' lack for information and training or due to barriers posed by the attitudes and practices of education professionals. It is readily acknowledged that the participation of parents from diverse multicultural and economic backgrounds has been difficult to achieve. Efforts to date to systematically address this have been minimal. Additional outreach and training strategies must be developed and put into place to ensure broader levels of participation among these parents.

- **Ensure that each Parent Training and Information center (PTI) has the information and capacity to support parents and students in the IEP and transition planning process.** These PTIs represent a national network of organizations charged with the responsibility of providing parents information and support in relation to their child's participation in special education. PTIs must be viewed, in part, as a logical and important network for sharing information on the transition service requirements of IDEA 1997. In addition, parents also need information on the juvenile justice systems, appropriate strategies and programs for serving youth with emotional and behavioral disabilities, information on community service programs and their availability, and many other issues.

Challenge 5: Improve collaboration and system linkages at all levels

The effective use of interagency collaboration and cooperation to address transition needs of youths with disabilities has been difficult to achieve due to widely varying factors, including: (1) lack of shared information on students across agencies, making it virtually impossible to develop integrated service plans that support individuals in achieving school and post-school results (Johnson et al, 2000); (2) lack of follow-up data on program recipients that could be used to improve service effectiveness (Johnson, McGrew, Bloomberg, Bruininks, & Lin, 1997; Stodden & Boone, 1987); (3) lack of adequate attention in IEPs to health insurance, transportation, and other aspects of adult living; (4) lack of systematic transition planning with those agencies that would assume responsibility for post-school service needs (Hasazi et al., 1999; Johnson & Sharpe, 2000); (5) ineffectual interagency agreements (Guy & Schriner, 1997); (6) difficulties in anticipating needed postschool services; (7) inability to define the role of parents and students in decision-making and planning for transition (Furney & Salembier, 1999; Hanline & Halvorsen, 1989); and (8) inefficient and ineffective management practices for establishing interagency teams (Johnson et al., 1987). Despite these problems, interagency collaboration and coordination of services must continue as a major strategy in addressing the needs of youths with disabilities.

A wide range of collaborative approaches and models have been part of the ongoing effort to improve transition services and post-school outcomes for youth with disabilities and families for more than two decades. For example, the coordination of services across federal, state, and local agencies is one of the most importance objectives of federal transition policy. Collaboration has also been a central theme in supporting students' access to the general education curriculum. Broad levels of collaboration between general education and special education have been stimulated through recent research and demonstration projects funded by OSEP. Collaboration has also been promoted as a means to achieving more efficient services through interagency resource pooling and cost-sharing, cross-agency training and staff development initiatives, coordinated service planning, and other methods. To improve collaboration at all levels to support the transition of youth with disabilities from school to adult life, there is a need to:

- **Promote general education and special education collaboration.** This would include collaborative models of student assessment, IEP and transition planning, and instruction between general education and special education to promote positive school and post-school outcomes.

- **Establish cross-agency evaluation and accountability systems.** This would include evaluations of school and post-school employment, independent living, and related outcomes of former special education students.

- **Develop innovative interagency financing strategies.** Fiscal disincentives should be removed and waiver options provided to promote cost-sharing and resource-pooling among agencies in making available needed transition services and supports for students with disabilities.

- **Promote collaborative staff development programs.** Approaches such as cross-training, train-the-trainer, team-building, and others involving collaborative

relationships between state and local agencies, institutions of higher education, parent centers, and consumer and advocacy organizations must be promoted

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Presenter: Martha Thurlow

Topic: Standards-based education and issues when preparing youth with disabilities for postsecondary education

Discussion Questions:

1. Can you identify the positive and negative consequences of standards-based systems as they exist where you are? Do the positives outweigh the negatives, or vice versa?

2. In what ways do each of the issues identified in this paper relate to the transition of students with disabilities to post-secondary education?

3. What is the most important first step to take to ensure that students with disabilities benefit from standards-based assessment and accountability systems?

Related Implication Briefs: Studies 4, 6, 9, 12, &14

National Capacity Building Institute
2001
Preparation of Youth with Disabilities for Participation in Postsecondary Education & Lifelong Learning

March 2001

Discussion Paper

Students with Disabilities in Standards-based Assessment and Accountability Systems: Emerging Issues, Strategies, and Recommendations

Rachel F. Quenemoen, Camilla A. Lehr, Martha L. Thurlow, Carol B. Massanari

Overview

In 1994, Congress reauthorized the Elementary and Secondary Education Act (ESEA). The Title I provisions of the Act require that expectations and outcomes for students served by Title I be the same as for all other children. This reauthorization, called the Improving America's Schools Act (IASA) of 1994, also requires that states and districts set challenging standards for student achievement, and develop and administer assessments to measure student progress toward those standards. As they do this, *all* students in schools receiving Title I funds are to be held to these standards, the progress of *all* students is to be measured by these assessments, and results for *all* students must be reported to the public. Using assessment reports reflecting the progress of *all* students toward high standards, schools are to make the instructional and structural changes needed so that *all* of their students have opportunity to meet the standards. These features of Title I law are the core components of what is called standards-based reform: content and performance standards set for all students, development of measurement tools to measure the progress of all students toward the standards, and accountability systems that require continuous improvement of student achievement.

Students with disabilities are specifically included in the definition of "*all*" students in IASA 1994, but the amendments to the Individuals with Disabilities Education Act of 1997 (IDEA 1997) further clarify Congressional expectations. IDEA 1997 focused state and district attention on the challenges of full participation of students with disabilities in assessment systems, and in conjunction with the IASA legislation, on the challenges of understanding and developing inclusive accountability systems that will improve outcomes for all students. In other words, the assessment provisions of IDEA must be considered within the context of the accountability provisions of IASA

Theory of Action

We are several years into national, state, and district efforts at implementing standards-based reform. In 1999, the National Research Council (NRC) published a review of progress thus far in standards-based reform, specifically based on Title I requirements. In this report, the authors suggest that a "theory of action" for driving the reform movement is inherent in the reform legislation:

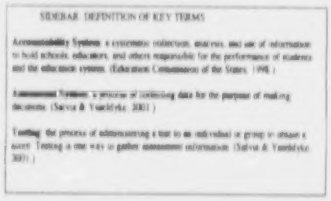
> Generally, the idea of standards-based reform states that, if states set high standards for student performance, develop assessments that measure student performance against the standards, give schools the flexibility they need to change curriculum, instruction, and school organization to enable their students to meet the standards, and hold schools strictly accountable for meeting performance standards, then student achievement will rise.

As portrayed by the theory of action, the intended outcome of standards-based reform is increased levels of learning and achievement for *all* students in our nation's schools. The model assumes that all students are included in all components of the reform agenda – standards, assessments, flexibility, and strict accountability.

As standards-based reform is implemented for all students, concerns have been raised that despite the intended positive consequence of higher student

achievement for all students, there is the potential for unintended negative consequences. Furthermore, the reform movement has influenced the implementation of additional policies and procedures that must be examined for all students, with and without disabilities. These secondary policies and practices are also implemented with the intent to improve student learning and achievement. For example, states have begun to implement policies to end social promotion. The overall intent of these policies is to ensure that students have mastered grade level material before being promoted. However, among the unintended effects of this policy may be an increase in the number of students retained and in the number of students who drop out (Quenemoen, Lehr, Thurlow, Thompson, & Bolt, 2000).

This paper addresses emerging issues affecting students with disabilities in standards-based assessment and accountability systems. Challenges and possible strategies for addressing the challenges are provided, as identified by policymakers, researchers, and practitioners, based on a model developed by the National Center on Educational Outcomes (NCEO). Finally, recommendations for action are proposed.


SIDEBAR: DEFINITION OF KEY TERMS

Accountability System: a systematic collection, analysis, and use of information to hold schools, educators, and others responsible for the performance of students and the education system. (Education Commission of the States, 1998.)

Assessment System: a process of collecting data for the purpose of making decisions. (Salvia & Ysseldyke, 2001.)

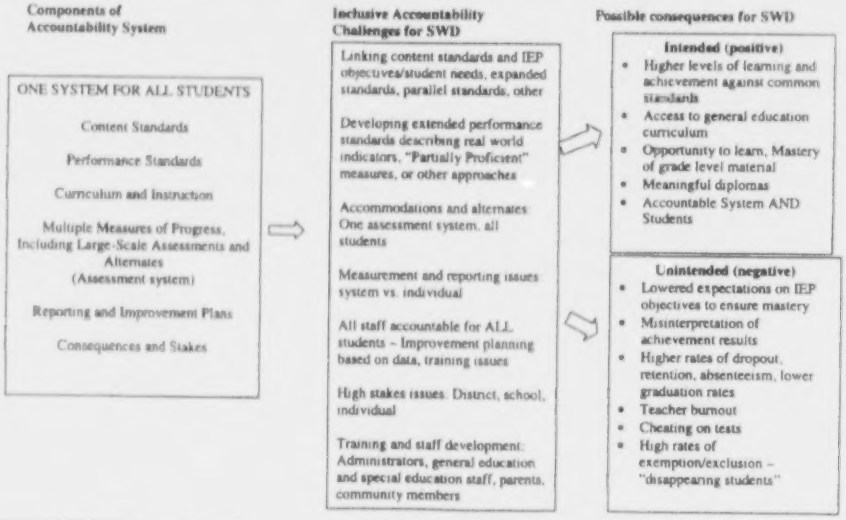
Testing: the process of administering a test to an individual or group to obtain a score. Testing is one way to gather assessment information. (Salvia & Ysseldyke, 2001.)

Model for Considering Issues Related to Students with Disabilities in Standards-based Assessment and Accountability Systems

The model shown in Figure 1 illustrates an adaptation of the theory of action of standards-based reform. The model shows:

- The components of the accountability system driving school reform (content standards, performance standards, curriculum and instruction, assessment systems, reporting and improvement plans, consequences, and stakes),
- Challenges that arise as students with disabilities are included in the system, and
- Examples of some issues affecting students with disabilities in inclusive accountability systems and secondary policies and practices.

Issues Related to Students With Disabilities (SWD) in Assessment and Accountability Systems (NCEO Adapted from the Model of the Theory of Action of Standards-Based Reform; NRC, 1999)


Components of Accountability System
ONE SYSTEM FOR ALL STUDENTS
Content Standards
Performance Standards
Curriculum and Instruction
Multiple Measures of Progress, Including Large-Scale Assessments and Alternates (Assessment system)
Reporting and Improvement Plans
Consequences and Stakes
Inclusive Accountability Challenges for SWD
Linking content standards and IEP objectives/student needs, expanded standards, parallel standards, other
Developing extended performance standards describing real world indicators, "Partially Proficient" measures, or other approaches
Accommodations and alternates: One assessment system, all students
Measurement and reporting issues: system vs. individual
All staff accountable for ALL students – Improvement planning based on data, training issues
High stakes issues: District, school, individual
Training and staff development: Administrators, general education and special education staff, parents, community members
Possible consequences for SWD
Intended (positive)
Higher levels of learning and achievement against common standards
Access to general education curriculum
Opportunity to learn, Mastery of grade level material
Meaningful diplomas
Accountable System AND Students
Unintended (negative)
Lowered expectations on IEP objectives to ensure mastery
Misinterpretation of achievement results
Higher rates of dropout, retention, absenteeism, lower graduation rates
Teacher burnout
Cheating on tests
High rates of exemption/exclusion – "disappearing students"

Components of Inclusive Accountability Possible consequences for SWD Accountability System Challenges for SWD

The model was initially adapted from the NRC model by staff at NCEO, and was further refined after discussion by 135 participants at the June 2000 Alternate Assessment Forum in Salt Lake City, Utah. (For complete proceedings from the Alternate Assessment Forum in Salt Lake City, Utah, see http://www.coled.umn.edu/nceo/OnlinePubs/Forum2000/ForumReport2000.htm.) Participants were primarily state department of education assessment and special education staff, but also included some local or regional education staff, university staff, parents, and test publisher staff. The model was used in a Forum plenary session designed to facilitate conversations to identify and explore the effects of assessment and accountability systems for students with disabilities, as

experienced up to this point.

The process was divided into three rounds. In round one, groups of four to eight people discussed a series of questions about inclusive accountability challenges for students with disabilities, and then discussed the consequences of these challenges for students with disabilities. In round two, one person from the original group remained at a table with the original notes, and others left to join new groups. The same series of questions was posed in the second round with the newly formed groups. In round three, participants returned to their original discussion groups to address needed strategies at the state, regional, and national levels to resolve issues that arise from identified challenges and consequences.

For each of the three rounds of discussion, recorders at each table completed discussion recording forms and notes capturing participant responses. At the completion of the process, documented participant responses to each round of discussion were collated according to the three categories of: (1) perceived challenges, (2) perceived positive or negative consequences, and (3) perceived strategies. Brief summaries of the challenges, consequences, and strategies as perceived by the participants are presented below by general category. These summaries are followed by some general recommendations and concluding remarks.

It is important to remember that these challenges, consequences, and strategies are the *perceptions* of a group of involved stakeholders at one point in time. It is hoped that researchers and policymakers can use the summary to develop informed research questions and policy revisions where necessary. Further, it is hoped that practitioners at the state and district levels can make use of proposed strategies and recommendations to continuously improve standards-based assessment and accountability systems so that all students benefit from them.

Perceived Challenges

Content and Performance Standards for All Students

Participants perceived challenges in designing a system to measure performance of all students against common standards. They suggested that the challenges vary depending on the nature of the state and district content standards as suggested in earlier writing on the gray areas of assessment systems (Almond, Quenemoen, Olsen, & Thurlow, 2000). The greatest challenges appear to be in states with highly specific content requirements, with limited flexibility as to *how students will learn* to the standards, and with limited flexibility as to *how students will show* what they know and are able to do. A more general challenge in all states is how to adjust performance standards for the alternate assessment for students with the most significant disabilities. However, some participants suggested that content and performance standards provide a clear directive on "what" students, including those with disabilities, need to know and be able to do, and that the standards force us to address "opportunity to learn" issues for *all* students.

Accommodations and Alternate Assessments – One System, All Students

Challenges involved in designing one assessment system for all students include varying understanding of accommodations, modifications, and alternate assessment, as well as issues of technical adequacy of these options. Numerous writers have called attention to these issues (Thurlow, House, Boys, Scott, & Ysseldyke, 2000; Tindal, 1998; Tindal & Fuchs, 1999). According to participants, there can be a mismatch between purposes of assessment for system level instructional improvement versus individual instructional planning. Another mismatch may be between the need to have data that have high validity and reliability versus moral, ethical, and inclusion issues. The "one system, all students" challenges closely intertwine with measurement and reporting issues.

Measurement and Reporting – Psychometric Soundness

Technical and psychometric difficulties with existing assessment systems were perceived as a major issue, but fairness of use of results is a related and complicating issue. Some of the challenges identified by participants include: putting all students on the same scale versus accountability for all, a need for a balance between what makes sense for improvement planning versus psychometric soundness, and how to compare fairly across schools, districts, and states with so many uncontrolled variables.

School Improvement Planning Based on Data for ALL Students

The development of the assessment system is meant to yield data that will drive instructional

improvement. For instructional improvements that benefit all students to occur, several challenges have to be addressed, including training on purpose and uses of data, and ensuring that all students, specifically those with disabilities and those with limited English proficiency, are included in the improvement processes. Helping local teams understand their roles, and the complexities of making good plans based on the data are major challenges to states and districts, as perceived by these discussants.

Training, Professional Development – All Partners Supporting All Students

Discussants expressed a belief that there is a high and immediate need for broadly based training for administrators, parents, and both general and special education teachers. This echoes the concerns raised by the National Research Council in *Testing, Teaching, and Learning* (1999, p. 3): "In our view, standards-based policies can affect student learning only if they are tied directly to efforts to build the capacity of teachers and administrators to improve instruction."

High Stakes Issues

States and districts vary in the stakes attached to their assessment system. There were both system level and individual student level issues raised about high stakes. Participants discussed whether we are just looking at "testing" all students OR testing all *and* using results for improvement. Other questions they raised involved the civil rights implications of various approaches to diplomas, and whether the system should be held accountable prior to holding students accountable.

Perceived Consequences for Students with Disabilities

Positive Consequences

The discussion groups recognized anticipated positive consequences of standards-based reform efforts for students with disabilities in implementation thus far. These positive consequences include:

Higher Levels of Learning and Achievement Toward Common Standards

Discussants reported a perception that the linking of the state standards and the functional curriculum for students with the most significant disabilities has improved IEP goal writing, and has refocused the IEP on instruction and curriculum. Some reported that more students with disabilities are being included in the general education curriculum and in general education classes. In addition, teachers report doing more authentic instruction, and using more instructional accommodations. However, given the limited time that we have had focused efforts to include all students, there was limited discussion of actual measurement of achievement gains for students with disabilities at this point in time.

Access to General Education Curriculum

Participants speculated that schools could become more inclusive as general and special educators partner to ensure all students have access to the general education curriculum. They perceived that "ownership" of special education students is now shared with general education more so than in the past. Here again, the evidence was anecdotal, but perceptions were generally positive.

Opportunity to Learn, Mastery of Grade Level Material

As special education students are expected to learn toward high standards, IEP teams, general education staff, and special education staff are forced to rethink how students spend their time in school. For example, teachers have suggested that as they learn new assessment strategies for their students participating in alternate assessments and link those strategies back to instruction, they have refocused on learning and away from care-taking.

Accountable System and Students, Meaningful Diplomas

Participants observed that teachers report they are thinking of new ways to assess students, simplifying IEPs, and getting down to what is important. The new accountability provisions open communication pipelines from state to local, and administrators to providers. Ultimately as we implement standards-based reform, there is a perception that we have refocused on core learning and skills, and the ability of students to apply the skills in multiple settings. That makes the diploma – whichever option the student earns – more meaningful.

Negative Consequences

Participants also perceived negative consequences in implementation, which are described in the following categories:

Lowered Expectations on IEP Objectives to Ensure Mastery

There was concern expressed that assessments may begin to address only lower level skills, ones that all can accomplish, as teachers and schools raise concerns about accountability indices. Concomitantly, IEPs may reflect this focus on lower level skills in more limiting annual objectives. States that have developed an IEP-based alternate assessment are at highest risk for this unintended negative consequence. Additionally, if states and districts interpret standards-based measures as being demonstrated only through traditional academic exercises (e.g., classroom based learning, testing), we may short-change students with respect to employability skills or life skills education while they spend more time on academics outside of applied settings.

Misinterpretation of Achievement Results

There was discussion of possible inappropriate use of scores. For example, high stakes based on large-scale assessment scores may provide incentives to include more students in alternate assessment, or a backlash may develop that suggests that disability is the reason students cannot learn or cannot perform well on assessments, thus students with disabilities should not be expected to learn. Alternatively, interpretations of low scores for students with disabilities may be used to suggest that special education is not effective, without attention to the complexities of establishing valid and reliable trend lines within a population that is constantly shifting (Bielinski & Ysseldyke, 2000; Ysseldyke & Bielinski, in press).

Higher Rates of Dropout, Retention, Absenteeism, Lower Graduation Rates

Participants discussed concerns that challenging standards and inappropriate use of assessment data without appropriate interventions and opportunities to learn will cause students with disabilities to give up, drop out, be retained, or be truant.

Staff Burnout, Cheating on Tests, Other Symptoms of an Unworkable System

There have been numerous headlines related to teacher burnout, high rates of teacher and principal retirements or resignations, and cheating on high stakes tests during the past few years. No one would argue that the challenges of implementing such massive reform has taken its toll on otherwise dedicated professional staff. Participants did not address this item in any detail – and some suggested that change is never easy, and this shift to standards-based accountability is a major shift.

High Rates of Exemption/Exclusion – Disappearing Students

Finally, there was concern expressed that schools may become less inclusive with high stakes test pressures. Schools may be unwilling to "house" classes of students with significant disabilities if having a large number of students in the alternate assessment lowers the accountability index rating for that site. Participants suggested that this can be addressed by formulas in the accountability system to allow for unusual population profiles, or through equating processes to integrate results from the alternate assessment into the accountability indices. The expression was used that "Kids and teachers are hiding under rocks from the assessment – special education, private schools, teachers exempting students, moving kids – who's accountable for them?"

From the discussion on perceived positive and negative consequences of the challenges, participants moved to identifying concrete strategies to maximize positive and minimize negative consequences of standards-based reform for students with disabilities.

Strategies to Address Consequences

The discussion groups at the Alternate Assessment Forum identified numerous strategies to address consequences. These strategies fall into five broad categories:

- Improvement of instruction
- Improvement of assessment tools, measurement, and reporting
- Improvement of the accountability system
- Training of multiple partners
- Addressing high stakes and related civil rights issues

Strategies for Improvement of Instruction include intensifying work on alignment of curriculum,

instruction, and assessment, but with more formalized evaluation of opportunity to learn and teacher performance. Discussants suggested that integration between special education and general education is a key strategy, making general education teachers more responsible for differentiated instruction, and helping special education teachers focus on preparing students for community life, independence, employability. A key strategy here is to improve preservice training for *all* educators, since general education needs more attention to individualized teaching, and special education needs more attention to specialized assessment, planning, and teaching.

Strategies for Improvement of Assessment Tools, Measurement, and Reporting include the development of a standards assessment model with inclusivity built in at all levels, including assessment item and process development, administration, scoring, and reporting. Participants suggested that states and districts need to ensure that all students are assessed and that the determination of a particular type of participation is appropriate. States and districts can compare strategies used elsewhere to be sure every student counts, perhaps through using accountability indices to incorporate different levels of performance for general assessment and alternate assessment; through sending scores of students in separate facilities back to the home school, or by coding carefully, yet ensuring every score counts, even if additional data are required to fit the assessment results into the accountability system fairly.

States and districts must account for all students (e.g., absences, excluded, regular, accommodated, alternate), and how they do so should be included as an element of the monitoring process. An additional framework for special education and limited English proficient students may be helpful: for example, instead of four levels, add a fifth category that might include access skills. For example, for the alternate assessment participants, we may explore the use of prerequisites for skills that help us make scores more meaningful in the short term; for limited English proficient students, we may explore the use of prerequisites for English. Care would be needed to avoid using these categories as a way to circumvent all students being measured, however. Working toward more accommodation friendly assessment systems while balancing issues of reliability and validity is essential. Test publishers have to work more closely with their customers, the states and districts, on solving technical issues, and researchers must be partners in the effort.

Strategies for Improvement of the Accountability System include review of accountability processes and products to make changes as necessary based on data that are emerging. Participants recommended keeping varied perspectives in the stakeholder mix, since having people who do not think students with disabilities should be in the system work with you helps you to address tough questions up front rather than after implementation is entrenched. Include special education and LEP staff in early discussions about accountability, and involve parents and policymakers as well. States need to take the time to consider all aspects of accountability. Learn from other's mistakes. Develop or adopt a useable model for continuous improvement for use by school improvement teams, and provide training and support as local teams implement the model.

Strategies for Training of Multiple Partners focus on changing attitudes and on building skills. Training for special educators is a must, and should include how to collect a body of evidence and strategies to collect data on students with diverse needs. But administrators and general education teachers must be included in the training – all the partners need basic assessment literacy, and an understanding of how assessment data are used to identify improvement strategies. State and local partnerships that include higher education are needed for developing and implementing training. It is important to conduct multiple meetings where people sit down and talk through the issues. Include parents in development, in refinement, and in delivery of training. All partners, including parents and students as appropriate, may need to understand why it is important to have higher expectations for all children, including those with the most significant difficulties.

Strategies for Addressing High Stakes and Related Civil Rights Issues include the strategies of directly articulating civil rights issues to all partners, and embracing the reality that all students have the right to an opportunity to learn, and to fair assessment and accountability practices. Keep discussions open and all partners involved as diploma options, promotion requirements, or access to interventions are determined. Understand and carefully abide by the valid uses of specific assessment data for various purposes, and educate legislators and governors on the

appropriateness of various approaches for varying purposes and uses. Develop skills of teachers and teams in developing a body of evidence of student work that can supplement assessment scores for high stakes decisions for students, and develop policymakers' understanding of the need for multiple measures.

Recommendations

Including students with disabilities in standards-based assessment and accountability systems is one way to ensure all students have equal opportunities to learn to high standards, and is required by Federal law. Yet state and district staff who are implementing standards-based reform are finding that challenges in implementation of fully inclusive systems arise from many different sources, ranging from the technical adequacy of existing assessment instruments for all students to the attitudes and beliefs of educators and other stakeholders about what students with disabilities can and should learn. Each of these challenges can affect students with disabilities in positive or negative ways, depending on how they are addressed.

The strategies that emerged from the discussions at the Alternate Assessment Forum in Salt Lake City are concrete approaches to address challenges policymakers and practitioners are seeing in early implementation of inclusive assessment and accountability systems. All of these strategies have potential to increase the positive consequences and minimize the negative consequences of school reform for students with disabilities in some settings. Yet, as documented elsewhere, state and district approaches to standards-based reform vary widely – on the beliefs and assumptions inherent in the system, on the nature of content and performance standards, on the nature of the assessment methods used, and on the degree of stakes (Almond et al., 2000). Thus, there cannot be a "recipe" of recommended concrete strategies that will work in all contexts, but we can make some general recommendations built on the strategies discussed here. In that light, here are a few general recommendations that can apply to all states and districts as we work toward fully inclusive assessment and accountability systems that truly benefit all students.

1. **With essential internal and external partners, use a data-based continuous improvement process to monitor the implementation of your inclusive assessment and accountability systems.**

   - Recognize from the start that the systems can be continuously improved, and encourage feedback and open discussions of what is working and what is not within education and with the public. Expect the test publisher or developers of your assessment system tools to be involved in these discussions.
   - Study the implications of early implementation of the assessment system and the accountability system using a research based evaluation model managed by a neutral research organization (e.g., University, research firm) if possible. Include measurement of consequences of your system for special populations as a design requirement. Use the data to develop test specifications, and expect your test publisher or developers to respond to needs you identify. Expect the people or organizations providing technical expertise to help you solve problems of accessibility as you identify them. Work with policymakers to make sure that accountability policies are refined to address identified needs.
   - Work hard to discern the difference between blind resistance to change and the informed insight of stakeholders who see legitimate problems with the system. Working often and openly with a broadly based implementation advisory group of stakeholders with varied and strong perspectives will help you sort through the noise of early implementation.
   - Make sure your advisory group clearly addresses and includes the targeted populations that have had traditional "performance gaps," and their representatives. These groups include, but are not limited to, students with disabilities, limited English proficient students, disadvantaged students, and ethnic minorities.
   - Develop an open relationship with leaders of news organizations in your state. Offer them seminars on the assessment and accountability system, and provide good information on the consequences of an inclusive assessment and accountability system for all groups of students.

2. **Identify all the key stakeholders, and keep communications open among all partners as implementation occurs.** Commit to a top-down, bottom-up partnership in learning how to include all students fairly. Some leaders in

state assessment and accountability systems call this "growing this from the classroom and school up!"

- Work with legislators and governors to build their commitment to and understanding of a flexible, continuous improvement model of assessment and accountability systems that benefit all students.

- Listen to, learn from, and respond to the students, parents, teachers, and schools in the front lines of implementation of assessment and accountability, including those from all special populations.

- As a state or district leader, be willing to take a stand for changes or improvements that will help all students reach toward high standards, and then show what they know and are able to do. Then be willing to sell the rationale to leaders both at the legislature and in the classroom if it is necessary. A time of great opportunity for positive change for all students is a time for courage and commitment.

3. Keep the standards high and keep your focus clear.

- "Keep your eyes on the prize" of all students and all schools being successful.

- Provide resources, strategies, training, or whatever it takes to help schools improve teaching and learning. That may include helping them understand what the data mean for different groups of students, or how to develop good school improvement plans. It may require specific training on instructional methods, on structural options for the school day and classroom, varied approaches to assessment, or WHATEVER it takes to help students be successful.

- You may find you need to change the nature of some of your state or district content or performance standards, based on thoughtful review and consideration of what the citizens of your state or district believe all students should know and be able to do. *Keep the standards high for all students, even as you change the precise nature of the standards.*

Conclusion

For too long, when the education system found that some students were not achieving high standards set for them, the system lowered the standards for those students. Through standards-based reform there is an opportunity to change that pattern. Now, for *all* students, we must keep the standards high and do whatever it takes to help students be successful. There can be changes in the curriculum, the structure, the time it takes to learn, the way we assess, but there cannot be lowering of the standards.

With the great opportunity to ensure that all students will be successful comes some risks. According to our model, the intended positive consequences of standards-based reform for students with disabilities include:

- Higher levels of learning and achievement against common standards
- Access to the general education curriculum
- Opportunity to learn, and mastery of grade level material
- Meaningful diplomas
- Accountable system AND students

Yet we are also seeing negative and unintended consequences such as:

- Lowered expectations on IEP objectives, in order to ensure mastery
- Misinterpretation of achievement results
- Higher rates of dropout, retention, absenteeism, lower graduation rates
- Teacher burnout
- Cheating on tests
- High rates of exemption/exclusion – disappearing students

There are many concrete strategies for states and districts to use to increase the positive consequences of standards-based reform for students with disabilities and to minimize the negative ones. States and districts can share their experiences and ideas to generate more strategies. But in the long run, a methodical and

thoughtful commitment by *all* stakeholders to *all* students is required if standards-based reform is to benefit all students. By recognizing the benefits and the risks, by working together to identify and overcome challenges and continuously improve our systems for measuring student outcomes, and by holding our schools accountable for *all* students, all students and all schools can be successful.

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Presenter: Paul Wehman

Topic: Linking and Supporting Students with Disabilities in Secondary Education, Postsecondary Education, & Employment

Discussion Questions:

1. What role does an economy which is providing new and different types of jobs in technology have on postsecondary education and career planning?

2. What are the major obstacles which affect successful transition from school to adulthood and how can educators intervene with these which are problems that occur away from the school?

3. Why do you think people with disabilities remain unemployed at such high levels?

4. What elements are critical in an effective transition program for successful postsecondary and/or competitive employment?

Related Implication Briefs: Studies 1, 3, 4, 5, 6, 7, 9, 10, 12, & 14

National Capacity Building Institute
2001
Preparation of Youth with Disabilities for Participation in Postsecondary Education & Lifelong Learning
March 2001

Discussion Paper

Vocational Placements and Careers

Paul Wehman Valerie Brooke Katherine Inge

Sara is a 19 year old student with severe mental retardation and autism that resides with her family. She has limited expressive language and communicates primarily through her body language and willingness to participate in activities. She is dependent on others for her personal and daily living needs. Sara is enrolled in a self-contained class at a high school. As indicated in her IEP, she participates in a community-based vocational education program that provides supported employment services. As a result, she has maintained employment in a part-time job at a restaurant as a food prep worker for more than a year. Her job duties include the breading of ravioli, eggplant and zucchini sticks and panning loaves of bread for baking. She assists her co-workers with the daily general clean up by taking all dirty pans to the sink area. Her job duties were negotiated and carved from the comprehensive job description for food prep. She works approximately 22 hours a week as part of her school curriculum and earns $6.25 an hour. Transportation is provided to and from work by the school during the week and her parents on the weekends.

Sara's daily needs while at work are supported by her co-workers, managers, assistive technology and her job coach. As an example of her co-worker and manager supports, she receives assistance taking off and putting on her coat; placing and retrieving items from her locker, clocking in and out; putting on and taking off her hair net, apron, and gloves; washing her hands; replenishing her work supplies and going on break. She accompanies her co-workers in setting up her work area for the duties assigned for the day from the food prep sheet. The manager assigns a co-worker to assist her as a part of the routine. She is provided verbal and physical assistance throughout her work day as needed. Technological assistance has been incorporated into the routine to supplement the assistance needed. As an example, the manager ordered a magnetic scanning card which eliminated the need to manually enter her employee number into a computer for clocking in and out. An audio prompting/praising system was developed to provide her consistent intervention and decrease her dependence on others for successful work performance. Assistance from her job coach consisted of thorough assessment activities prior to employment, job development activities, the provision of job site training utilizing systematic instruction, developing work routines, restructuring job duties, identifying and arranging supports to address her needs and providing ongoing monitoring of her work performance and satisfaction.

Sara is a good example of the many students with special needs who must decide on what type of postschool placement and career path they will follow. As most children leave middle school and enter high school, their thoughts turn to college, jobs, careers, and, essentially, what they are going to do with their lives. For tens of thousands of young people with disabilities, the questions are as follows: Can I get off a waiting list and into a vocational training program? Will Vocational Rehabilitation (VR) find me eligible for services? Can I get a job that pays more than $4.50 an hour? Will I be stuck in the same job for the rest of my life? Will I always be in an adult activity center or a sheltered workshop? For decades, the answers to these questions were not very encouraging. In fact, most people with disabilities were happy if they received any level of service. The opportunity to choose a different job, particularly one that came with decent wages and 40 working hours a week, was a rare occurrence.

With the advent of supported employment for people with disabilities, the passage of PL 101-336, the American with Disabilities Act (ADA) of 1990, and other positive advances in rehabilitation, there is greater vocational opportunity than ever for young people with disabilities. In rehabilitation and other postsecondary agencies, there is an increasingly strong feeling that vocational services should make transition-age students a priority-- a feeling that has been intensified by the large investment in resources for special education entitlement programs. This chapter is about vocational placement options and models for providing vocational services as well as different types of jobs, careers, and opportunities that can and should be made available to young people with disabilities (e.g., Wehman & Kregel, 1998).

Sheltered workshops and adult activity centers are no longer an appropriate end point for young people with disabilities leaving school (Block, 1997). Although for a few persons, segregated day programs may be the only placement option, most students with disabilities need to aspire to competitive employment in a career as their first option and work to achieve that before settling for less. If people with disabilities do not view themselves positively and have high vocational aspirations, then the expectations of advocates, family members, friends, and others working on their behalf will reflect that position.

Business and Industry: Understanding the Role of the Economy

Many of the world economies are currently in the best shape that they have been in decades. In the U.S., for example, more new jobs have been created in the period of 1992 to 2000 than in any other time period within the century. The inflation rate is lower than it has been since the early 1950s. Interest rates have been moderate and have not interfered with the growth of the economy which continues to steadily expand at a rate of approximately 3% a year.

Although the U.S. economy is expanding at about an annual rate of 3% or better average wages and benefits are actually rising at a slower pace than last year. Most Americans without disabilities are now working, yet pay increases are smaller than ever. How can this be? The answer is productivity. The evidence is now overwhelming that U.S. businesses are continuing to find ways to gain more output from their workers, their machines and their technology, long after the initial wave of downsizing and cost-cutting. Redesigning products to make them cheaper to produce, reengineering processes to take out unnecessary costs--such activities have become a permanent focus of corporate America, imposed by a competitive marketplace and encouraged through compensation programs at all levels of the company.

At the same time, as a result of outsourcing and a wave of corporate mergers, more and more economic activity is being shifted out of inefficient firms--or those parts of firms that were inefficient--and into the hands of large, specialized companies that have figured out the best way to do things and can take advantage of the economies of scale. Furthermore, innovations such as telecommuting, employee leasing, the increase of temporary work agencies, use of the Internet, computer technology, mobile telecommunication devices, part-time work, and self-employment have also contributed to ways of making companies utilize existing personnel in a more efficient way.

Unfortunately, the unemployment level of persons with disabilities has not improved in many countries throughout the world. A number of federal agencies, public policy makers, consumer groups, and professionals have focused significant attention on why the unemployment rate of persons with disabilities remains so high. This unemployment rate in the U. S. has consistently hovered in the 60% to 70% area for decades despite increased innovations in rehabilitation and newer laws such as the Americans with Disabilities Act (P.L. 101-336). Additionally as noted by Hunt, Habeck, Owens and Vandergoot, (1996), the real economic cost of disability, that is lost production from individuals not at work, has been growing rapidly in recent years. According to Chelius, Galvin, & Owens (1992) employers have been paying 8% of payroll for disability related expanses. Furthermore, innovations such as assistive technology, health interventions, job coaches, and new training techniques along with progressive laws, designed to ease the entry of persons with disabilities into the competitive work place, have not resulted to date in a noticeable improvement in their level of employment (Haffe, 1998).

The development of greatly improved employer accommodations, rehabilitation interventions, and medical treatments play an increasingly large role in the implementation of work supports for workers with

disabilities (e.g., Wehman & Kregel, 1998). In the past decade, especially, there has been a significant amount of time, money, and thought gone into studying how these types of accommodations can be utilized to support persons with disabilities and their employers. The key aspect which accommodation, intervention, and treatment all have in common is support. Over the years, a key philosophical change has been the substantial paradigm shift from a clinic or center-based approach of Afixing/curing@ persons with disabilities to instead supporting them with a customized array of resources as designed by the employer, worker, and often rehabilitation provider. These supports can be generated by the business, outside professionals, or the individual and his or her family depending on their need.

With the performance of much of the world economy, it would appear that many of the positive attributes of an improved economy should provide significant employment possibilities for persons with disabilities. One would think that persons with disabilities should have greatly expanded work opportunities and that the unemployment rate for them would be rapidly declining. Unfortunately, this does not appear to be the case. As noted above, the unemployment rate according to the U.S. Bureau of Labor Census (1997) indicates that persons with disabilities are unemployed at a rate still exceeding 60%. Pay is substantially lower for those persons with disabilities, when compared to those without disabilities.

The ability to be employed is important for many reasons. First, working in competitive employment provides an opportunity to receive wages and benefits that may lead to greater independence and mobility in the community at large. Second, as described above, the extraordinary costs associated with maintaining persons with disabilities on Social Security disability rolls are a highly nonproductive and inefficient use of human potential in this county that is now reaching an unacceptable level. This high level of entitlement leads to greater federal deficits and ultimately fosters the incorrect perception among society that people with disabilities are dependent on public support and not capable of active lives that include competitive employment. Third, being productive on a daily basis in a meaningful vocation is critically important to one's self-esteem and dignity. Finally, establishing new friendships and networks of social support in the community is almost always facilitated by having a job within a career path.

The question then is: What can professionals, advocates, the business community and individuals with disabilities do to help increase meaningful employment? This chapter is devoted to discussing solutions to this question.

Barriers to Employment Competence

Power and Influence

One of the first barriers that must be considered in the unemployment saga of people with disability is their collective inexperience with gaining control over key events in their lives. The American culture is firmly rooted in a set of values that are strongly tied to power, control, and influence. Bookstores, newspapers, and magazine articles are filled with feel good stories about self-made millionaires, powerful CEO's of large corporations, and gifted athletes from humble backgrounds signing multi-million dollar contracts. Americans have a great fondness for these stories because they are about people who take control of their lives, accept risks, make difficult decisions, set goals, and most importantly become successful.

Historically, individuals with disabilities have been denied access to the very events that would provide them with the opportunity to take risks, make decisions, and ultimately experience these highly prized American values of power, control, and influence. Further, due to a lack of economic resources or loss of specific skills, many people with disabilities re dependent and vulnerable on a human service system where they are stereotyped and stigmatized (Condeluci, 1991). Among medical and human service professionals, people with disabilities are viewed as a recipient of services with very little to contribute. Consequently, systems get created and service practices get institutionalized that contribute to the disempowerment and dependency of people with disabilities.

For many individuals with disabilities disempowerment and dependency seeds are planted while the person is still very young. In many communities, young children attending special education classes ride a different school bus than other children living in the same neighborhood and attending the same school. Typically, these special school buses pick-up students attending special education classes in front of their homes instead of the regular bus stop where the other children wait. As these young people grow into adolescents they begin attending special disability only, scouts programs, dances, and other leisure

programs. These dependency seeds continue to grow as many young people reach adulthood and begin attending highly structured sheltered workshops where professionals are in charge and the opportunity for people with disabilities to make decisions, develop positive attitudes, and to achieve self-determination is greatly diminished.

Health Care Benefits and Social Security Administration (SSA) Policy

Perhaps the most imposing barrier to employment for persons with disabilities is potential loss of income assistance and health care through programs administered by the Social Security Administration (SSA) and the Health Care Financing Administration. The two major SSA disability programs are Supplemental Security Income (SSI) and Disability Insurance (DI). While the two have different eligibility criteria, under both programs individuals with disabilities must prove themselves to be incapable of engaging in substantial gainful activity (SGA), currently determined by earnings of over $500 per month, to be eligible for benefits.

For many individuals with disabilities, full-time employment with health benefits is not an option due to low levels of job skills, local labor market conditions, limitations in stamina or endurance, or the need to commit substantial amounts of time to personal care needs or treatments. Yet if they obtain part-time employment, they risk losing cash and other benefits, particularly medical coverage under Medicaid (in most states linked to eligibility for SSI) or Medicare (linked to eligibility for DI). This economic disincentive persuades most beneficiaries to limit their earnings to less than SGA or, more commonly, not enter the labor market at all (Bowe, 1993).

The impact of economic disincentives for SSA beneficiaries to return to work has become all too clear to SSA, the Congress, and the American public. From 1985 to 1994, annual SSA disability benefit recipients grew from 4.2 million individuals to 7.2 million, a 70% increase, and cash benefits grew from $23.1 billion to $52.6 billion, a 66% increase (U.S. General Accounting Office [GAO], April, 1996). The primary causes for this growth are (1) increasing numbers of applications, particularly from younger individuals and those with mental impairments, and (2) very low rates of return to the work force for those who become beneficiaries (Rupp & Scott, 1995).

SSA has instituted a number of incentives to reduce the risks of employment for beneficiaries, such as referral to state Vocational Rehabilitation (VR) services, trial work periods, continuing eligibility for Medicare, deduction of impairment-related work expenses (IRWE) from taxable earnings, and allowing beneficiaries to exclude income from calculation of SGA using a Plan for Achieving Self-Sufficiency (PASS). However, according to a recent report by the GAO (April, 1996), few SSI or DI beneficiaries know about these incentives or understand how to access them, and thus these incentives have virtually no impact on return to work.

Employer Attitudes

Closely aligned with the state of the economy are attitudes of employment. Negative attitudes regarding citizens with disabilities appear to be deeply based and difficult to change. Such viewpoints and prejudices among employers are an important impediment to the hiring of persons with disabilities (Bolton and Roessler, 1985).

According to a study by the Urban Institute (1975) a vase proportion of employers hold unfavorable attitudes toward the hiring of people with disabilities. Unfounded expectations of workers, such as poor attendance, higher insurance rates, and low productivity incite a reluctance of offer work (Fuqua, et al., 1984). Other research reveals employers believe that employees with disabilities do not possess good worker traits. This is evidenced by assumptions that these employees will be absent, tardy, work at a slower pace, and are overall less productive than their nondisabled coworkers (Florian, 1978; Williams, 1972).

Studies also recotd concerns about potential problems surfacing between workers with disabilities and their co-worker (Farina and Felner, 1973; Greenspan and Shoultz, 1981). Furthermore, Watson (1989) documented that line managers and personnel believe that having workers with disabilities on staff would make their work harder. Mithaug (1980) describes employer concerns about problems with flexibility among employees with disabilities. Employers also report concerns about the amount of supervision necessary to work with workers who are mentally retarded (Williams, 1972).

Eigenbrood and Retish (1988) indicate less positive attitudes toward workers with disabilities among men and older adults as compared to women

and younger adults. Given the face that a majority of workplace decision makers are male, this obviously could have a negative impact upon the hiring of persons with disabilities. In addition, it is indicated that the attitudes of supervisors have a major influence on the decisions to hire persons with disabilities. A finding supported in yet another study conducted by Shafer, et a. (1987) documents that employers who express a distinct belief that people with disabilities deserve to work and more receptive to hiring workers with disabilities. While Pati & Stubblefield (1990) documented the inability of employers to look at what a candidate with a disability can do as opposed to what he or she cannot do, Levy, et al. (1992) report that executives who did not have contact with persons with disabilities in the corporate work world have less positive attitudes than the executives who did have such experience.

Drehmer and Bordieri (1985) indicate that personal biases related to specific disability may indeed influence a decision to hire too. Other studies substantiate that employers are less optimistic about the work potential and capabilities of those individuals with sensory and cognitive disabilities as compared to those persons with physical disabilities (Fuqua, et al., 1984, English, 1971). Furthermore, Fuqua (1984) warns that this finding of differential attitudes towards unique types of disability should not minimize the fact that anyone with a disability has a difficult time obtaining employment.

Research focusing on barriers to hiring persons with disabilities reveals an array of differing perspectives. Fabian, et al. (1992) asked employers to identify barriers to the employment of persons with disabilities. The types of obstacles include: prejudices and fears, lack of knowledge related to disability related issues, limited experience working with people with disabilities and downsizing.

Impact of School Preparation

The importance of school preparation and training is also a major contributor to unemployment of persons with disabilities. While there have been major strides towards demonstrating the best practices that lead to successful transition from school to work, the majority of young people with disabilities continue to lag behind their peers without disabilities in post-school outcomes . A number of school follow-up studies have been completed since the 1980's. They indicate that students with severe disabilities leave school only to join the ranks of those who are unemployed or underemployed (Brodsky, 1983; Halpern, 1990; Haring & Lovett, 1990; Wagner, 1993; Wehman, Kregel, & Seyfarth, 1985).

Since 1985, SRI International of Menlo Park, California has conducted a National Longitudinal Transition Study of Students in special education (Wagner, 1993). This project, conducted for the Office of Special Education Programs of the U.S. Department of Education, has been gathering information concerning how well students with disabilities are being served under the IDEA. Included in the study are more than 8,000 youth with disabilities. Some of the results include the following:

Employment Outcomes

- Youth with disabilities do not achieve competitive employment at comparable levels to their able-bodied peers. ($p < .001$)
- Of the youth with multiple disabilities in the study were not employed when surveyed in 1987 or 1990. Of those employed, 10.2% lost their jobs during this time period.
- Of those youth with mental retardation were not employed when surveyed in 1987 or 1990. Of those who were employed, 12.9% lost employment during this time period.
- Of those youth with orthopedic impairments were not employed when surveyed in 1967 or 1990. Of those who were employed, 5.6% lost employment during this time period.

Independent Living Outcomes

- Only 13.4% of those youth with multiple disabilities in the study were living independently 3-5 years post graduation.
- Only 23.7% of those youth with mental retardation in the study were living independently 3-5 years post graduation.
- Only 38% of those youth with orthopedic impairments were living independently 3-5 years post graduation.

These findings reveal the relatively poor transition outcomes for students with severe disabilities, indicating a need to provide services that facilitate successful post-school outcomes.

Transportation

The lack of available, affordable transportation is an employment barrier that cuts across virtually all disability groups (President's Committee on Employment for People with Disabilities, 1992). For many individuals with disabilities, such as those with epilepsy, visual impairments, mental retardation, or severe physical impairments, driving is restricted by law or by individual limitations. For members of other disability groups (such as psychosocial impairments) who are unemployed, financial constraints may prohibit automobile ownership. In either case, the result is many individuals with disabilities must rely upon either public transportation or alternative modes of transportation in order to enter the job market.

Community mobility is a necessary prerequisite not only for employment, but also for inclusion in social and recreational activities and use of community resources and facilities. A study of self-determined adults with disabilities conducted by West and colleagues (1995) found that transportation and independent mobility in the community was a major factor in developing self-determination. Having means of accessing different environments increased the range of options in the areas of work, socialization, recreation, and housing. Being mobile also enabled those individuals to exercise control, allowing them to decide where and how they lived, rather than relinquishing that control to service agencies, family members, or others.

The Americans with Disabilities Act of 1990 (ADA) mandated that public transportation facilities and vehicles, including buses, vans, rail cars, etc., be accessible to persons with disabilities (Architectural and Transportation Barriers Compliance Board, 1994). While much progress has been made in improving access to transportation systems, many individuals with disabilities have not been affected because of (1) lack of voluntary compliance or overall cutbacks on routes in response to the ADA, or (2) absence of transportation systems in their communities (National Council on Disability, 1995a,b; Weller, 1994).

In the absence of public transportation, creative solutions to transportation barriers must be employed, particularly in rural areas or in situations where individuals may be unable to move close to their jobs. Some of these options include:

1. Using a personal assistant, friend, or family member to assist with transportation;
2. Ride-sharing with a coworker, possibly with reimbursement for expenses;
3. Arranging for transportation through paratransit services or other human service agencies;
4. Locating jobs within companies (such as some hospitals and nursing facilities) which offer employee transportation for those in need; or
5. Assisting individuals with disabilities to locate work-at-home jobs, such as self-employment, on-line data entry, child care, etc.

Consider Mark and the difficulties he has had with his transportation problems at 5:00 p.m. Mark exited from the contemporary looking office building where he was employed as a customer service representative into the cold drizzling rain and waited for his ride home. Even though he had to remain outside to make sure he did not miss his ride, he did not let this bother him too much. Instead he chose to focus on how fortunate he was to have a job, which gave him an inner feeling of warmth and the strength to bear the cold and wet weather.

Ten years earlier at the strong and youthful age of twenty-one, Mark was involved in an automobile accident which left him with a complete spinal cord injury. His life had changed dramatically since the injury. He was dependent upon others to help him with his activities of daily living, like putting on his clothes and cooking; he even needed assistance when eating solid foods. Overtime, Mark had made great progress. Just last year he had moved out of an adult home and was now living in an apartment by himself. An aide came in every morning and evening to assist him with the things he was not able to accomplish alone.

As Mark waited for his ride, he reflected on how life kept getting better. One month ago he was offered a position at an insurance company. After six long years of looking for a suitable work opportunity, he finally found an employer who was willing to take a chance and believe in his abilities. The career offered decent wages and good benefits, which would give him the chance to be self-sufficient and no longer depend on the monthly public assistance he received.

Mark watched as his coworkers exited the building and drove off the premises. He knew most of them by

name and offered a sincere good night which initiated a take care or see you tomorrow, from them in return. During his short tenure at the company, Mark had made several new friends. As a matter of fact, he and his buddies planned to get together at the Octoberfest this weekend, which was certain to be a good time. Mark's thoughts were suddenly interrupted by a huge clap of thunder. He looked up into the dark sky and thought if his ride did not get there soon, he would surely get soaking wet.

Mark stared down at the digital watch with was mounted on the arm of his wheelchair. It read 6:00 p.m., and his ride was nowhere in sight. A security guard patrolling the parking lot stopped and asked Mark if he needed help. He requested that the guard call the paratransit service that was supposed to pick him up one hour earlier. Before the guard could be connected to a human voice, the van pulled up to the building. By now Mark could feel the stinging cold on the parts of his body that still had sensation. He thought his nose and ears must be frozen. Tears began to swell in Mark's eyes as he was wheeled to the lift by the van driver, who offered no apology for the late arrival. Mark felt very angry about being subjected to the incompetence of others and frustrated because this was his only option. He was further saddened and frightened by the fact that he might have been left outside in the cold the entire night.

The next day, Mark did not arrive to work, but instead he was wheeled into the local emergency room. The doctor's prognosis was not good. Mark would need to be admitted and ultimately was diagnosed with pneumonia. He may require hospitalization for weeks; only time will tell, said the physician to Mark's sister, Jenny. Jenny called Mark's place of work and explained the situation. Afterwards, she stated to Mark in a reassuring manner, The boss said there is nothing to worry about; you just concentrate on getting well. Two months passed before Mark was released to return to work. Fortunately, his job was still available when he was able to return

Vocational Placement Options: What Are the Choices?

Historically, there have been very limited vocational choices for people with disabilities. Those who were labeled as such were referred to rehabilitation counselors, and if the counselors could place them, they were considered lucky. In the 1960s and 1970s, the number of sheltered workshops and assorted types of day program arrangements increased dramatically, which increased the options for rehabilitation counselors but left people with disabilities looking for competitive jobs with the same poor quality of choice (Weaver, 1994). Furthermore, as Weaver has observed, many rehabilitation services are not competitively offered. As more progressive thinking has prevailed, however, inclusionary work opportunities in competitive employment arrangements have become the highest goal and vocational option of choice. There is an increasing recognition that individuals with disabilities need to be heavily involved in planning their own futures (Wehmeyer & Lawrence, 1995). The following sections review different vocational options that are available in some communities in the United States. Some communities have more vocational options and models from which people with disabilities can choose. In addition, some of these communities have limited or stopped the development and expansion of the less desirable choices, such as large adult day activity centers.

The federal-state vocational rehabilitation program, also known as the Rehabilitation Act Amendments of 1992, PL 102-569, is the primary program through which people with disabilities apply for vocational rehabilitation assistance. However, this program is not an entitlement, meaning that some people with disabilities are not accepted into the program. Eligibility requirements vary from state to state. The sequence of activities required for entry into vocational rehabilitation is outlined in following table:

The Basic Vocational Rehabilitation Process

Application

People who apply or are referred to the state department of vocational rehabilitation must complete applications for service. Every state has such a department.

Eligibility determination

Each person is then evaluated to determine eligibility and potential for employment.

Eligible people:

- Have a physical, mental, or emotional disability
- Have a disability that is a substantial barrier to

employment

- Are reasonably expected to be employable after receiving rehabilitation services

Rehabilitation plan

Eligible individuals have been determined to work with counselors to prepare individualized written rehabilitation plans (IWRPs) that include

- A vocational goal with estimated start and completion dates
- Counseling and guidance activities
- Specific services and their providers
- The individual's rehabilitation responsibilities
- Intermediate objectives
- Financial services (when necessary)
- Job placement activities

Services provided to eligible individuals

Rehabilitation counselors may provide any or all of the following 15 services:

1. Guidance and counseling
2. Vocational evaluation
3. Physical health, mental health, and medical services
4. Vocational training
5. Financial maintenance
6. Transportation
7. Family services
8. Interpreter services
9. Telecommunication aids and devices
10. Recruitment services in public service employment
11. Job placement, including supported employment placement
12. Postemployment services
13. Occupational licenses needed to enter specific occupations or employment
14. Rehabilitation engineering services
15. Any other services that can reasonably be expected to benefit an individual with a disability in obtaining employment

Job placement

At the conclusion of rehabilitation, the counselors work with the clients to find and secure suitable employment. Cases are considered closed when clients have been employed at least 60 days in suitable jobs.

Day Programs and Sheltered Workshops

In the United States, there are approximately 5,000 adult activity centers or day programs that serve people with mental, physical, and emotional disabilities (Butterworth, et al, 1999; McGaughey, Kiernan, McNally, & Gilmore, 1993). These programs are sponsored by The ARC, United Cerebral Palsy Associations, local churches, and other community organizations. The bulk of community funds for mental health and mental retardation are still allocated to these types of local arrangements for people with developmental disabilities. Usually these programs offer activities of daily living, training, prevocational training, make-work vocational activities, field trips, recreation, and other types of special education-related curricula that people with severe intellectual disabilities are assumed to require.

Generally, these programs operate on a 9 a.m.-3 p.m. day. Often transportation is provided, and as many as 50-75 people congregate in a center. Studies have repeatedly shown that people who are placed into these centers do not leave them and never graduate to workshops or into competitive employment (Buckley & Bellamy, 1985). They are, in effect, day care programs with very limited instruction for progression into real-life activities. Staffing ratios tend to be unfavorable, and staff generally work year round for low salaries. Although staff in these programs tend to be very committed to delivering the best services they can, the general notion of the adult day program operates from a flawed perspective.

Traditionally, the philosophy of the adult day program is that adults with severe disabilities should learn skills in center-based programs and, ultimately, generalize those skills into competitive employment and independent residential life. This notion is

essentially based upon a medical model of training, which aims to fix someone's disability to make him or her well enough to successfully enter the real world. Although a nice idea, this does not work and proves grossly inefficient when compared to providing support to people with disabilities in natural work environments and real home living environments.

In fact, there are very few positive endorsements for the large-scale maintenance of adult day programs. Most agree that they should be shut down or phased out by with the new millennia and have funds transferred to providing support to people in more productive and dignified community pursuits (Rogan, 1999). People with disabilities can perform quite nicely in the real world with help and support and do not need to be segregated with disabled people.

As community services providers become more skilled at the technical aspects of vocational program development, job development, assistive technology, and working with business and industry, there will be little or no interest or demand for adult day care services.

Rehabilitation Facilities

Bill

Bill has been labeled with autism, severe retardation, mental retardation, and multiple disabilities. His parents are anxious for him to enter the local sheltered workshop even though his teachers, among others, feel that he might benefit from a competitive employment or supported employment program. But Bill's parents have already spoken with the director of the local sheltered workshop, and arrangements have been made for Bill to go to the sheltered workshop each morning during his last year of school.

At the sheltered workshop, Bill puts paper clips in boxes. He is responsible for doing 100 boxes an hour and is supposed to put 20 clips in a box. He is paid 2 pennies for every box he completes. Bill is surrounded by people with mental retardation or physical disabilities. Most of them are nonverbal or only marginally verbal. Bill's placement has no fringe benefits, no room for advancement, and only limited likelihood that Bill will be placed in competitive employment. If he is placed in competitive employment and support is not available, Bill cannot be expected to generalize any skills that he has learned into a new, faster-paced competitive environment because he has not been trained. This course, although chosen by him and his parents, will lead to a path of segregated employment and, subsequently, a dependent vocational lifestyle. Service providers, advocates, special education teachers, and families must ask themselves whether they have made the right choice when people like Bill are placed in sheltered workshops.

A 1991 survey conducted in 50 states found that approximately 20% of all day programs were planning to convert or redirect many of their resources into integrated employment activities (Wehman, Kregel, & Revell, 1991). This means that more money will be spent on placing people with disabilities into real jobs and less for adult activity center supervision. Furthermore, the same survey indicated that programs providing supported employment services increased from 300 to more than 2,600--a change that reflects a move away from exclusively center-based activities. The conversion of day programs to programs that provide real jobs is not without controversy however. As Block 1999 notes:

Two concepts of vocational opportunities for persons with developmental disabilities seem to be dominant in the United States. The first is competitive employment and the second involves training in a sheltered workshop setting. Proponents of sheltered workshops and those advocating supported employment tend to characterize their positions as polar extremes. The divisiveness between the two camps can be attributed to differences in values, beliefs, or organizational philosophy. Advocates of supported employment would expect each other to share in a set of beliefs and values which drive decisions to close sheltered workshops. However, decisions of this type are not always agreed to by professionals, consumers of service, relatives of consumers, community members, or policy makers who consider sheltered workshops to be viable service options. A decision to close a sheltered workshop and convert to a supported employment system can be met with resistance, hostility and public criticism.

Job Placement and Sample Careers

For years, the preferred vocational option for people with disabilities has been job placement in the competitive employment market. Employment is typically gained in one of two ways. The first is through the use of rehabilitation counselors who are located in most cities and towns through state and federal vocational rehabilitation programs and funded primarily by the federal government through the Rehabilitation Act Amendments of 1992.

Rehabilitation counselors usually have bachelor's and master's degrees in counseling, work adjustment, evaluation, and placement services. They are expected to understand all disabilities and carry extraordinarily large caseloads (i.e., 100-200 cases at a time). Subsequently, it is very difficult for counselors to provide the individualized service coordination and specialized placement services that increasing numbers of people with severe disabilities require. Furthermore, most counselors are unable to provide the extended follow-up and on-site services--such as regular visitation,telephone contact, and training--that are required to help some people with disabilities maintain employment.

Rehabilitation counselors have come under fire because of these heavy caseloads and their subsequent inability to handle the most challenging cases. In fact, several studies (Hasazi, Gordon, & Roe, 1985; Hess, Kregel, & Wehman, 1991; Wehman, Kregel, & Barcus, 1985) indicate that a family--friend network--the second method of job placement--is often a more valuable way of quickly getting jobs for people with disabilities. The family--friend network reflects an increasing reliance on people in the community--that is, employers, friends, and other individuals not involved in the vocational rehabilitation system who are willing to try to find jobs for people with disabilities. These contacts have resulted in many job placements for people with disabilities in local businesses and industry. These are many possible careers and types of jobs for people with disabilities to consider. One needs to review the Dictionary of Occupational Titles to have some sense of how rehabilitation counselors can identify possible careers. The following table has a list of possible careers.

Sample Careers and Businesses for Employment

1. The Dictionary of Occupational Titles defines Building and Related Services occupations as those concerned with the cleaning and upkeep of building interiors and the conveying of passengers and freight by elevator (p. 281).

2. The Dictionary of Occupational Titles defines Sales occupations as those concerned with 'selling real estate, insurance, securities, and other business, financial, and consumer services' (p. 219).

3. The Dictionary of Occupational Titles defines Production and Stock Clerk occupations as those occupations concerned with compiling and maintaining production records, expediting flow of work and materials, and receiving, storing, shipping, issuing, requisitioning, and accounting for materials and goods' (p.194).

4. The Dictionary of Occupational Titles defines Food and Beverage Preparation occupations as those concerned with preparing food and beverages and serving them to patrons of such establishments as hotels, clubs, restaurants, and cocktail lounges (p.240).

5. The Dictionary of Occupational Titles defines clerical occupations as those concerned with making, classifying, and filing primarily verbal records. This domain includes activities such as transmitting and receiving data by machines equipped with a typewriter-like keyboard, cold-type typesetting, word processing, and operating machines to duplicate records, correspondence, and reports; to emboss data on metal or plastic plates for addressing and similar identification purposes; to sort, fold, insert, seal, address, and stamp mail; and to open envelopes (p. 171).

6. The Dictionary of Occupational Titles defines Lodging and Related Services occupations as those concerned with the >cleaning and upkeep of building interiors and the conveying of passengers and freight by elevator (p. 247).

7. The Dictionary of Occupational Titles defines Plant Farming occupations as those concerned with tilling soil; propagating, cultivating, and harvesting plant life; gathering products of plant life; and caring for parks, gardens, and grounds. Service occupations performed in support of these activities are also included (p. 285).

8. The Dictionary of Occupational Titles defines Information and Message Distribution occupations as those concerned with the distribution of information and messages by direct personal or telephone contact, involving such activities as delivering mail, relaying messages by telephone or telegraph equipment, arranging travel accommodations, and directing visitors at reception points: (p. 205).

9. The Dictionary of Occupational Titles defines Computing and Account-Recording occupations

as those concerned with systematizing information about transactions and activities into accounts and quantitative records, and paying and receiving money. It includes such activities as keeping and verifying records of business and financial transactions; receiving and disbursing money in banks and other establishments; operating data processing and peripheral equipment; computing and verifying amounts due for goods and services; preparing payrolls, timekeeping records, and duty rosters; combining data and performing computations to create statistical records; and computing costs of production in relation to other factors to determine profit and loss. (p. 181).

Mitchell

Mitchell, who is 20, is diagnosed as having attention-deficit/hyperactivity disorder (ADHD), learning disabilities, and neurological impairments. He has multiple auditory and visual learning disabilities, represented by his inability to read and compute as well as his disorganized memory and planning skills. Mitchell was referred to a rehabilitation counselor by both his vocational and special education teachers. His rehabilitation counselor recently completed a special course on adults with learning disabilities and spent several hours counseling Mitchell about vocational options. Specifically, the counselor wanted to know what Mitchell liked most about work and what his ideal job would be.

Mitchell's father is a vice president in a bank, and Mitchell wanted to work in a similar environment. Therefore, a concerted effort was made to find a placement in a community financial institution. One of the major banks in town had a job opening for a service specialist in the car loan department. This job entailed entering all loan payments in the general ledger system and checking them against the correct account numbers. Because much of this job had been automated, the supervisor had to work specifically with Mitchell for a number of weeks. Because of Mitchell's motivation and prior interest in his father's work, however, Mitchell was able to perform this job successfully without specialized on-site help. Within 3 months, Mitchell was very pleased and satisfied with his employment.

Initially, the bank gave Mitchell only 20 hours of work per week, questioning his ability to do the job quickly enough. He has since been elevated to 40 hours per week and has even been working overtime. The major reasons for the success of this placement were 1) Mitchell's interests were given careful consideration, 2) his father's background in the field had a positive family influence, and 3) the counselor communicated frequently with the employer to verify Mitchell's progress.

Job placement for young people can and should be a reality before they exit the public school systems. Once students leave school, it becomes more difficult for them to enter the work force. Whether they acquire jobs through the rehabilitation system or through their families and friends, these students need to be directed into the mainstream work force and taught marketable skills before they become so discouraged that they choose not to work.

Transitional Employment

One of the most popular forms of vocational placement and rehabilitation that has traditionally been used for people with mental illness is called transitional employment (Gervey & Shafer, 1995; McCarthy, Thompson, & Olson, 1998), which is being expanded to serve more individuals. In the McCarthy, et al., (1998) paper the authors describe a statewide project in Rhode Island to convert day treatment programs for persons with mental illness to competitive employment. With the transitional model, rehabilitation counselors or other vocational staff are assigned to work with people who need specialized help on jobsites. Generally, there is an understanding among the client, employer, and staff person that the amount of help the individual receives will last from 2 weeks to 3 months. Furthermore, there will be limited follow-up--the employer will maintain the supervision and training of the employee just as he or she as would with an employee without disabilities. With increased numbers of persons identified with serious mental illness and viewed often as a threat to society, working through transitional employment becomes a very high priority.

As Drake (1998) notes:

We know that the majority of consumers with severe mental illness desire competitive employment. We also know that transitional employment is an effective strategy for helping them to attain their goal. The tragedy for consumers and their families is that supported employment is so rarely available in many communities. The majority of consumers with mental illness get no transition and rehabilitation services at all. And of those

who do receive some type of rehabilitation services, the great majority receive step-wise services that tend to limit their achievements and to socialize them into sheltered jobs in nonintegrated settings. If we know that supported employment is needed and effective, why does the field ignore consumers' wishes and rely upon outmoded strategies? Why do services continue to lag so far behind the research evidence?

The answer, sadly and deplorably, appears to be that major service strategies in the field are driven more by self-promotion, ideology, available financing mechanisms, and attempts to shift costs and save money than by the evidence on what works. If Medicaid pays for day treatment and does not pay for family psychoeducation and supported employment, guess which service most consumers will receive.

Robert

Robert, who is deaf and has mild cerebral palsy, is 26 years old. He has been in an institution for 5 years where he received office training. Robert has been referred to vocational rehabilitation, which has placed him in two different jobs. He has lasted less than 2 weeks at each because of communication problems at the jobsite. Robert was then referred to a third job. At this time, a transitional counselor, Marika, was assigned to work with Robert for approximately 60 days. Marika is a certified interpreter and spent time working with the co-workers, the supervisor, and Robert to facilitate the adjustment process. She also made several physical accommodations at the jobsite so that Robert could maneuver around the area better. Over several weeks, Robert became increasingly independent and no longer needed Marika,he had adjusted to his position. His co-workers learned how to communicate with him better and began to get to know him as a person.

Transitional employment is one approach to vocational rehabilitation takes a little more time than others and is a bit more individualized. However, it does not lend itself to steady and frequent communication with employers and jobs of much higher quality for people who have been consistently failed by the current system. It has historically been used for persons with mental illness.

One Stop Career Centers[1]

In recent years there has been increasing frustration among persons with disabilities as well as employers that employment services are spread across so many different agencies. These agencies often give different answers, use different language, and have different funding requirements. This has made it very difficult for persons with disabilities and their families to locate the appropriate services to help meet their unique needs. Each agency has certain rules for eligibility to services. Consequently, in some states in the U.S., as well as countries around the world, there is a move toward consolidating services into what are called One Stop Career Centers.

Just imagine if you have disabilities like Mitchell or Bill and you continue to be sent to different agencies, programs, clinics or hospitals, trying to find appropriate services. What a discouraging way to help your child. Therefore, One Stop Centers have been set up to reduce these problems.

One Stop Career Centers consolidate under one roof a variety of employment options and training programs to form a delivery system for people who are job seeking, as well as employers who are looking to hire. The philosophical and theoretical foundation is to provide a common source of information and services which can serve a universal purpose no matter from which angle the customer approaches it. The goal of these centers is to provide convenience and to cut down on having to go to several different locations to receive different services. For example, several agencies might house in one location (co-locate) in order to provide this convenience; presumably this would ultimately reduce the fragmentation and bureaucratic red tape by doing only one standard intake from the person who wishes services and from this point on making the appropriate referrals. The philosophical themes which undergird this type of Center are in Table 9.3. On Stop Career Centers can provide public agencies and employment organizations an opportunity and a site to demonstrate the changes that are occurring in public programs, such as welfare reform.

1This material is adapted from Perry-Varner (1998).

Philosophical Principles in One Stop Shopping Centers (Table 9.3)

1. Universality

Anyone who is job seeking will be able to access a

variety of employment/vocation services. These centers will be based on the needs of the individual as well as employers. Further, data, services, resources, etc. will be more organized, therefore more "user friendly."

2. Customer Choice

Both jobseekers and employers can go to a central location, but more importantly, the centers will compete for their business. Competition is based on an understanding of both the jobseeker and the employer as "customers." Therefore, the customer will have more control over the make-up as well as the destiny of his/her search.

3. Integration

Links job training with job creating. Consolidates service agencies at a federal, state and local level into one location, creating a diversity of programs and more of a response to the customer's needs.

4. Accountability

Funding will be tied into the success of the centers, which will be quantifiably measured by the outcomes of its clientele. These measures will reflect the return on the agency's and well as the private sector's investment.

From: Perry-Varner, E. (1998). One stop career centers: an emerging concept for delivering employment services. Journal of Vocational Rehabilitation, 10 (1), 39-50.

Self-Employment

Traditionally, people with the most significant disabilities have been overlooked as candidates for self-employment. Indeed, even today, most entrepreneurship activity is not directed toward individuals with severe developmental or psychiatric disabilities. We are beginning to learn, however, that support systems, similar in concept to those utilized by the best Supported Employment practitioners, can help many people operate their own businesses, limited partnerships, and/or businesses within businesses. The key here, again, is the support that provides the entrepreneur a chance to compete in the open market.

The myriad of supports necessary for a small business owner typically include: accounting services, business planning, access to capital (loans), marketing consultation, and training in product or service production. The same needs are evident for individuals with disabilities, but sometimes the manner in which they are accessed is different. For instance, a typical entrepreneur has a credit history that a bank officer can review in structuring a start-up loan. In many cases, small business hopefuls with disabilities have little credit available and few savings due to long term reliance on Social Security. Support from rehabilitation personnel may be necessary to access Vocational Rehabilitation resources, determine useful assistive and/or universal technology, apply for local low interest loan funds, or to develop a Plan for Achieving Self Support (PASS) through Social Security in order to self-finance.

Existing personnel who are paid to help individuals with disabilities find success in the realm of employment will need new skills, and new staff may need specific personality traits to best serve their customers. Effective staff need many of the traits required of entrepreneurs in order to identify and facilitate supports required by an entrepreneur with significant disabilities to flourish. Small business now accounts for over 50% of the jobs in the United States, so personnel developing jobs and small business ventures need to share the spirit and enthusiasm for entrepreneurship.

Supported Employment: Growth and Impact

Since the 1980s, perhaps one of the most popular programs in rehabilitation--sparking discussion and controversy--has been supported employment (Block, 1997). The Rehabilitation Act Amendments of 1992 define supported employment as paid employment in integrated, real-work situations in which one must work at least 20 hours a week. According to this Act, services must be given to those with the most severe disabilities.

Prior to the availability of supported employment as a service option, the values inherent in traditional sheltered employment programs can be traced back to a time when community-oriented services for people with disabilities did not exist and a facility-based solution seemed to fit the need. Facility-based day programs offered families security, consistency, and safety.

Over time, however, people with disabilities,

families, advocates, and professionals began to criticize and openly disapprove of sheltered employment facilities. This general dissatisfaction occurred as a natural evolution of the philosophical mind-shift that emerged during the 1970's and 1980's. With the national publication of successful supported employment demonstration projects, there emerged a new rehabilitation model. Employment was seen, by many, as the means by which people with disabilities could obtain community membership.

The 1980's ended with a new array of vocational services for persons with significant disabilities. Essentially, the old practices of the 1970's continued while the new rehabilitation model called supported employment was added onto the traditional rehabilitation services options. People with severe disabilities could now choose from a variety of vocational alternatives. These alternatives ranged from day treatment services which are facility-based and generally non-vocational in design; to supported employment, which includes real jobs in the local labor market with assistance and support in obtaining and maintaining community integrated competitive employment. Table 9.4 lists nine values that have guided supported employment efforts from the early 1980's and provides a brief description of each.

Table 9.4

Supported Employment Values	
Values	Values Clarification
Presumption of Employment	A conviction that everyone, regardless of the level or the type of disability, has the capability and right to a job.
Competitive Employment	A conviction that employment occurs within the local labor market in regular community businesses.
Control	A conviction that when people with disabilities choose and regulate their own employment supports and services, career satisfaction will result.
Commensurate Wages & Benefits	A conviction that people with disabilities should earn wages and benefits equal to that of coworkers performing the same or similar jobs.
Focus on Capacity & Capabilities	A conviction that people with disabilities should be viewed in terms of their abilities, strengths, and interests rather than their disabilities.
Importance of Relationships	A conviction that community relationships both at, and away from, work leads to mutual respect and acceptance.
Power of Supports	A conviction that people with disabilities need to determine their personal goals and receive assistance in assembling the supports necessary to achieve their endeavors.
Systems Change	A conviction that traditional systems must be changed to ensure customer control which is vital to the integrity of supported employment.
Importance of Community	A conviction that people need to be connected to the formal and informal networks of a community for acceptance, growth, and development.

There are nine best practices that are encompassed in this approach to supported employment. They are listed in Table 9.5. Central to the concept is the idea that the customer is in control of the process. The role of the employment specialist is to assist the customer in reaching his or her career goals. The best practices form the foundation for the customer-driven approach to supported employment. High quality supported employment service providers will incorporate these practices into their daily activities of implementing supported employment services.

Table 9.5

Best Practices in a Customer-Driven Approach to Supported Employment

1. Choice
2. Control
3. Careers
4. Full Inclusion
5. Long-term Supports
6. Community & Business Supports
7. Total Quality Management
8. Assistive Technology
9. Person-Center Planning

From: Brooke, Wehman, P., Inge, K, and Parent, P. (1997). Supported employment: A customer-driven approach. In V. Brooke, K. J. Inge, A. Armstrong & P. Wehman (Eds.) Supported employment handbook: A customer-driven approach for persons with significant disabilities. (Monograph). Richmond, VA: Virginia Commonwealth University, Rehabilitation Research and Training Center on Supported Employment.

Choice

The opportunity to make choices concerning employment, living arrangements, and recreation has been limited or nonexistent for many individuals with disabilities. It has become increasingly evident that the powerlessness and lack of direction frequently felt by people with disabilities are related to the attitudes and practices of service providers, care givers, funding agencies, and society in general rather than any true limitation as a result of an individual's disability. For example, some individuals have never had an opportunity to make choices. Decision-making skills have not been taught or encouraged, or adequate information about alternatives has not been available. Many people with disabilities have voiced their concerns that all too

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frequently decisions are made by professionals who feel that they know best and that self-assertion is often ignored, underestimated, or seen as a challenging behavior.

Choice in a customer-driven model of supported employment would dictate that all supported employment customers are presented with a variety of experiences, options, and supports to achieve career goals of their choice. If individuals are to experience personal satisfaction and quality of life, regardless of the level or type of disability, they must be given the opportunity and support to express preferences. Supported employment customers need to be directing the process by choosing the service provider, the subsequent employment specialist, and the specific support services that they may need to obtain and maintain employment. State vocational rehabilitation programs can assist customers with this process by sharing supported employment agency summary data for the identification and selection of a service provider.

Control

The concept of control expands the above definition of choice to a broader concept of exerting control and ultimately self-determination. Customers of supported employment must be in a position to not only choose their service provider and employment specialist but to have a measure of control over the services that they seek. Federal legislation has begun to recognize the importance of this concept and the rights of persons with disabilities to have control over their lives.

Ticket to Work and Work Incentive Improvement Act

On December 17 the President signed into law the Ticket to Work and Work Incentive Improvement Act of 1999 (TWWIIA). This new law is designed to 1) increase beneficiary choice in obtaining rehabilitation and vocational services; 2) remove barriers that require people with disabilities to choose between health coverage and work; and 3) increase work opportunities while decreasing dependence on public benefits. The provisions of the law become effective at various times, generally beginning one year after enactment. The following table highlights the key provisions of TWWIIA.

Careers

Career development is an important consideration for any adult seeking employment. However, many supported employment service providers gauge success by the length of time an individual remains in the same employment position. In addition, service providers often put too much emphasis on the number of placements that they make rather than on customer satisfaction with an employment situation. These practices continue to occur for a number of reasons including inaccurate interpretation of federal and/or state rehabilitation policies that results in failure to use funds for job advancement; and limited employment expectations for people with disabilities among service providers, which directs customers into dead-end positions.

Full Community Inclusion

The concept of full community inclusion calls or a vision of society in which all persons are viewed in terms of their abilities and are welcomed into the mainstream of community life. The whole notion of community inclusion stresses relationships both formal and informal, as well as, business and social. Yet, a segment of the general public has the impression that people with disabilities are better served when they are with other people with similar disabilities. This faulty notion persists, in part, due to the creation of special services for people with disabilities and by not adequately representing or connecting people with disabilities to the formal and informal social structures.

Long Term Supports

Supported employment provides for the necessary supports to assist an individual with long term employment retention. By federal definition, supported employment includes at least two monthly contacts at the job site unless the customer requests otherwise. The long term support component is an extremely unique feature among rehabilitation services. Unlike other services, the entire notion of service termination is never addressed. The intention behind this feature of supported employment is the realization that individuals, as well as businesses, are fluid. Individuals do not simply get a job in a local business and then stay there for the rest of their lives. While the likelihood of remaining in the same occupation has remained constant, staying with the same employer or even in the same industry has declined significantly over the last ten years (National Alliance of Business, 1996).

Community & Business Supports

As stated earlier, the whole notion of support has been vital to the national expansion of supported employment. The individualized nature of supported employment in the delivery of needed assistance in conjunction with an employment specialist is the major reason why supported employment is widely accepted and promoted by people with disabilities. As the customer-driven approach evolves, the employment specialist must develop the necessary skills to ensure that the customers of the service are directing the process.

Continuous Quality Improvement

The concept of continuous quality improvement is known by many different terms and variations to include: Total Quality Control, Total Quality Improvement, Total Quality, and Managing for Quality. There are striking similarities between these terms that generally refer to an approach that can be used by a service delivery provider to constantly reevaluate quality. Continuous quality improvement calls for service providers to focus their time and energy on improving the process, the product, and the service. The key to continuous improvement is driven and defined by the customer.

Assistive Technology

Since the early 1970's, assistive technology or rehabilitation technology has emerged and opened unlimited employment opportunities for persons with disabilities. Individuals who at one time faced enormous barriers concerning accessibility, communication, and mobility can now optimize their intellectual and physical capabilities. With the use of voice synthesizers, people are able to express their wants and desires. Computers can be operated by a human voice or a simple gaze of an eye. This new technology is unlocking doors and providing opportunities for a greater number of people to obtain and maintain employment.

Person-Centered Planning

Supported employment has always been about assisting one person at a time in achieving employment satisfaction. Yet, over time, some people continue to be excluded from supported employment. Person-centered planning seeks to support the contributions of each person in his or her local community by building a support group around the individual. This support group or community network functions together to assist the focus person in obtaining his or her goals and aspirations. Group members commit to regular get-togethers designed to solve problems, develop strategies, and make commitments to act on behalf of the focus person with a disability.

Over the years, supported employment has continued to grow and progress. This progress has resulted in a new way of doing business. This vision of supported employment is characterized by a customer-driven approach to supported employment (Brooke, et al, 1995). This approach includes several critical best practices whiich are described in the following section.

Customer-Driven Approach to Supported Employment

Many individuals with disabilities have characterized their typical relationships with human service and/or rehabilitation professionals as paternalistic or as a professionals know best attitude. This general air of condescension toward individuals with disabilities has many negative and far reaching implications which ultimately affect the ability for them to direct their own lives and become fully integrated into their communities. When professionals view persons with disabilities as helpless, employers, family members, and the general public accept this same attitude. The result is the continuation of negative attitudes and stereotypical images of persons with disabilities throughout the general public. This same paternalistic attitude exists in the field of supported employment. Many rehabilitation counselors, case managers, job coaches, and program managers have been delivering supported employment services and engaging in practices that directly or indirectly transmit a message to persons with disabilities that Awe, the professionals, are in charge.

Role of Employment Specialist

The most exciting feature that is consistent throughout the customer-driven approach to supported employment is the clear shift of control from the service provider to the customer. Historically, this individual has had many titles such as: trainer advocate, job trainer, job coach, supported employment training specialist, and employment specialist. For purposes of this manual, the direct service position in supported employment will be referred to as the employment specialist or job coach.

Within a customer-driven approach to supported

employment, the employment specialists job functions are linked to major components of the support service to include the following: 1) customer profile; 2) career development; 3) employment match; 4) job-site training and supports and; 5) long-term supports/ extended services. However, the specific activities that the employment specialist actually performs within these categories will vary depending upon the needs of the individual requesting services. To adequately perform each of these functions, the employment specialist must move comfortably in and out of a variety of roles. There are five distinct roles that supported employment direct service personnel perform within each of the functions associated with a customer-driven approach to supported employment.

The five roles described in this section are not weighted, and therefore share the same level of importance. A good employment specialist would not, for example, focus solely on the consultant role or the planner role to the exclusion of the other areas. Rather, a well-trained employment specialist must be prepared to serve in many different capacities to effectively meet the needs of individuals with significant disabilities who seek supported employment services.

Planner Role

An employment specialist acting in the planner role would analyze the services that a supported employment customer was seeking and then assist him or her in the development of a plan to achieve the identified goals. The planner role involves the development of a customer profile in which desirable career options and community supports are identified. Mapping out activities, identifying potential supports, scheduling meetings with organizations, and identifying resources to be utilized would be important functions of the planner role.

Consultant Role

An employment specialist must be prepared to enter into a consultant relationship with customers of supported employment services. As with any consultant relationship, the expectations related to this role would be to provide recommendations based upon the consultant's knowledge and expertise. A specific example of the consultant role would be to provide recommendations to the customer in regards to employment selection, job site organization, use of compensatory strategies, technology, and potential support that would assist in getting and keeping a job.

Head Hunter Role

The employment specialist also engages in a variety of marketing activities ranging from the development and dissemination of promotional information about supported employment services to the identification of strategies for an individual to market him or herself to a prospective employer. A high power head hunter would remain current with community labor market and local economic development opportunities and include such job responsibilities as tracking data on primary and secondary labor markets within a community, conducting labor market surveys, and participating in business advisory boards.

Technician Role

An employment specialist will be required to perform in the role of a technician, requiring many technical skills and abilities. She or he must be well versed in the latest high and low rehabilitation technologies that would assist an individual to enter the world of work, to maintain a current employment position, or obtain a career advancement. The technicians role also requires the employment specialist to be able to identify appropriate strategies to teach needed skills, provide training as needs arise, and to fade assistance in a systematic process that ensures acquisition and maintenance of a skill. A typical example of the technician's role performed by an employment specialist is providing instruction to a customer on how to ride public transportation. The customer assists the technician in identifying a desirable training option and possible supports.

Community Resource Role

The community resource role requires the employment specialist to have a thorough knowledge of the community. This knowledge can be obtained by conducting regular community analysis activities that investigate potential support resources. These resource areas are not limited to the business community, but rather covers the entire range of community supports to include transportation, recreation, social, housing, and independent living, organizations and agencies.

Smull (1999) has assembled a number of comments from people with disabilities about what they like and dislike about the employment specialists. Table 9.6 describes these points.

Table 9.6

What I Would Want My Job Coach/ Employment Specialist to Know and Do

- Understand how I want to live.
- Understand the role of work in my life.
- Learn about my dreams/desires, gifts and capacities.
- Do not "place" me, offer me a job that you think will make sense for me.
- Do not try to make me independent.
- Help me become part of my work place.
- Be there if I need help because of challenges in other parts of my life, or changes at work.
- Keep listening to my words (and behavior) for requests for change-- a change in responsibilities, supervision, pay, or where I work.
- Help me find new jobs as I want/need them.

Reprinted with permission from Michael W. Smull (1999).

Does Supported Employment Work?

Many people have questioned how well supported employment works as a means to help unemployed persons with disabilities into competitive employment. Wehman, Revell, & Kregel (1998) looked carefully at data from 50 states to answer this question.

The national growth in supported employment participation from FY 1986 through 1995 is presented in Figure 1. Participation in supported employment rose from approximately 10,000 persons in FY 1986 to over 139,000 in FY 1995. The 139,812 participants for FY 1995 represent a 16 percent annual growth rate from the participant total reported for FY 1993).

Average hourly wages for supported employment participants steadily increased during the reporting period. For FY 1995, 40 states reported a weighted mean hourly wage of $4.70.

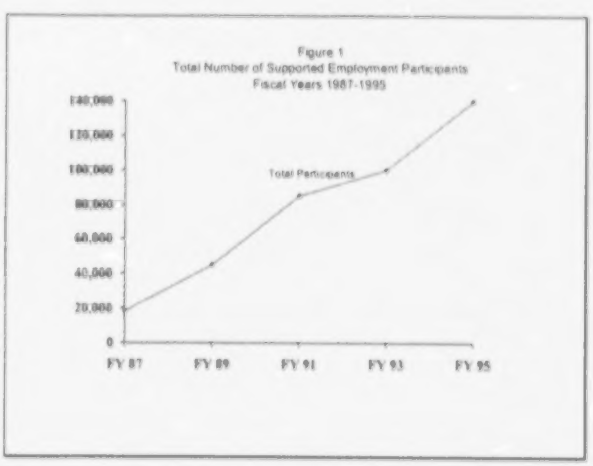
While this is a low figure, it must be remembered most persons in supported employment had never worked before because of the severity of their disability. They had been expected to stay in a sheltered workshop for the rest of their life.

Key findings from the results of the VCU-RRTC FY 1995 supported employment national implementation survey summarized above include:

6. The 16 percent annual growth rate for participation in supported employment from FY 1993 to FY 1995 is approximately double the rate of growth from FY 1991 to FY 1993.
7. The use of supported employment is expanding among persons with long-term mental illness, reflecting both a recognition of the viability of this employment resource across disabilities and also the evolution of extended services funding and/or support options to help supported employees maintain employment.
8. The wages for persons in supported employment in FY 1995 were over $750 million, thus making many people taxpayers for the first time in their life.
9. State funding agencies are securing supported employment services from provider agencies through a variety of funding methods. Increased attention is being given to focusing on specified positive employment outcomes within a funding design that makes a good faith effort to cover true costs while emphasizing service access for persons with the most significant disabilities.

Natural Supports in the Workplace

In order to help workers with disabilities retain their jobs and maintain employment, special help and



support is usually necessary. Thus in addition to job coaches there has been a move to emphasize the use of community and workplace supports (Hagner, Butterworth, & Keith, 1995). The notion underlying the natural supports approach reflects an increased recognition of the ability of employers to accept and accommodate a diverse array of employees; the potential role of family members in locating jobs; and the willingness and ability of co-workers to provide training, assistance, and support (West & Parent, 1995). Before turning to the research literature to evaluate the effectiveness of the natural supports, lets look at two of the most popular examples of natural supports: 1) the employer or supervisor as a training mentor, and 2) co-worker assistance.

Employer or Supervisor as Training Mentor

For a number of individuals with severe disabilities, the immediate employer or supervisor will be the best trainer for a number of reasons. In some cases, the job is simply too complex or specialized for a job coach to grasp without an extended learning period. Sometimes, companies simply prefer to use their own personnel for training. Other companies are committed to affirmative action hiring, but do not wish to have non-company personnel on the premises.

A particular benefit of this approach is that the employer/supervisor feels additionally empowered to handle difficulties that may arise on the job. A job coach or rehabilitation counselor still may be involved in the initial framing of the training, assisting with a behavioral management plan, or be available for troubleshooting, but the primary responsibility is assumed by the supervisor or employer. On-the-job training funds can be used as a means of compensating the employer or supervisor for the training time. It may be helpful for both parties to understand that the company is being financially compensated for this effort, which can further establish commitment to the training endeavor. These on-the-job training agreements are frequently developed for periods of 3-6 months using state rehabilitation agency funds or Job Training and Partnership Act (JTPA) monies, among other means.

Co-worker Assistance

Although a relatively new job placement model in vocational rehabilitation, the co-worker assistance approach appears to have considerable potential. The co-worker's roles include trainer, observer, and advocate for the client within the workplace, including the education of other staff about a client's specific cognitive assets and impairments. This typically leads to co-workers who are more cooperative and supportive of the client. At the Pacer Center in Minneapolis, Minnesota, they have developed an excellent table for how to be an advocate for natural supports. Table 9.7 list these points.

Table 9.7
Be An Advocate for Natural Supports

If you are an employer	If you are a parent	If you are a teacher	If you are an adult employment provider
Be open to include people with moderate and severe disabilities; focus on people's strengths	Advocate in general for inclusion of Natural Supports in your own workplace or in other organizations to which you belong	Involve the employer in training supervising and supporting students at work sites	Use your resources as a supplement to, not a substitute for, employers' resources
Build your capacity for workforce 2000 and increased diversity	Do regular career planning for your daughter or son to provide information on skills, interests, preferences, and support needs to help when it comes time to choose the right job	Prepare students for employment and community life, not the adult service system. Focus on communication skills, adaptive technology and supports each person needs to participate in the community	Keep in mind that your expectations shape employers' attitudes and that companies have the will and skill to hire and support workers with moderate and severe disabilities
Promote hiring people with disabilities among other employers	Be part of the network for job leads or job support for a person with a disability	Develop a network for job leads and support. Involve members of a student's broader community in planning meetings	Change your job development process to always include employers in identifying work place supports
Be involved in job search and support networks for persons with disabilities whom you know	Help your daughter or son find a job by approaching employers yourself		

Natural supports expanding the capacities of businesses, consultants and employees. Pacer Center. Minneapolis: MN, 1997 Newsletter.

Shafer, Tait, Keen, and Jesiolowski (1989) reviewed the limited, but growing, literature regarding the involvement of co-workers in the supported employment process, underscoring the following benefits: 1) the data on performanced-based feedback collected from co-workers is more likely to be reliable and to provide a realistic perspective on employment performance, and 2) a performance-based feedback

structure provides co-workers with a framework and reminder for giving feedback.

The Research Efficacy of Natural Supports

Test and Wood (1996a) reviewed procedural information and supports literature. Each of the 15 studies identified contained a specifically stated purpose; one third of which (5) involved case studies (Fabian, Edelman, & Leedy, 1993; Hagner & Farris, 1994; Rogan, et al, 1993; Shafer, Tait, Keen & Jesiolowski, 1989; West & Parent, 1995). There were also two surveys designed to describe the current status of natural supports (Hagner, Butterworth, & Keith, 1995; Peterson, 1995), and two others which provided objective data on coworker involvement (Rusch, Johnson, & Hughes, 1990; Rusch, et al, 1991). Test and Wood (1996a) provided a detailed chronicling the design and results of each of the 15 studies conducted. **It is noteworthy that less than 100 total subjects were included in all of these studies.**

As has been noted earlier, there is very limited research designed to determine functional variables within supported employment as a whole and, thus, it is not surprising that none exist within the area of natural supports strategies. Unfortunately, the lack of this type of research leaves supported employment vulnerable to anyone who calls what he or she is doing "supported employment". In others words, if someone says he or she is doing supported employment, then it must be supported employment. This same situation can be applied to natural supports strategies.

Additional research on natural supports strategies and related outcomes is clearly needed. Although many strategies have been suggested (e.g., Nisbet & Hagner, 1988; Rogan et al., 1993; Shafer, Tait, Keen & Jesiolowski, 1989), only one study was found that sought to investigate a specific strategy suggested by the literature, paid co-worker supports (Hood, et al., 1996). Research is needed to determine what strategies based on the concept of natural supports lead to improved consumer outcomes. Studies investigating procedures should include specific descriptions of subjects, replicable procedures, descriptions of research methodology, and specific intervention times.

One major study which was recently published by West, Kregel, Hernandez, and Hock (1997), reported findings from a survey of 385 supported employment provider agencies on their use of natural supports in time-limited and extended services. This study provided for a large scale descriptive analysis of what practices community rehabilitation providers are following in natural supports. An overwhelming majority of 85% of all respondents reported that their agencies emphasize natural supports in the delivery of supported employment services and that these supports have generally been successful and useful for all individuals on their caseloads. Among the problems identified by the respondents were resistance to natural supports by employers and co-workers, as well as difficulty in locating natural supports at the job site.

Those agencies that emphasized natural supports reported that they have used co-workers or supervisors for initial training for an average of 41.5% of their consumers; for ongoing monitoring and support, this percentage increased to over half (56.3% of their consumers. Natural supports appear to be used far less frequently in job development and placement, although the family-and-friends network is the typical avenue for early employment experiences for most persons starting out in the work world.

The findings of West, Kregel, Hernandez, & Hock (1997) give clear and powerful support to the arguments we made earlier relating to the lack of a clear and concise definition of natural supports. When 85% of all programs indicate that they emphasize the use of natural supports. in service delivery, the distinction between natural supports and job coaching is no longer meaningful. Most programs are using components from a number of different supported employment models in the design and delivery of services. Natural support strategies have become established as one of these components.

The findings of the West, et al. (1997) survey point to the potential impact of natural support methodologies on service access for these individuals. An encouraging finding is that better than eight of ten respondents indicated that they had found natural supports to be useful and relevant for all members of their caseload, including, presumably, those who are the most difficult to place, train, and maintain in employment. Among those reporting to the contrary, the primary reason was based not on the types of individuals served, but *by characteristics of the employment settings into which individuals were being placed.* Among the reported instances where natural supports did not work were such factors as fast-paced or high stress jobs or environments, highly competitive

businesses, and workplaces that weren't particularly friendly to any worker, disabled or not.

Most programs feel that the use of natural supports has contributed to the overall success of their supported employment programs. However, about two-thirds of the programs using natural supports indicate that they have experienced problems in the implementation of natural support strategies. These problems overwhelmingly fall into two areas. First, employers are unwilling to implement the natural support strategies recommended by the supported employment program and are resisting the notion that they should assume sole responsibility for the training, supervision and support of the employee with a disability. Second, local programs are having a difficult time identifying staff members with the skills necessary to implement natural support strategies, as well as providing training to current staff members in the use of natural support techniques.

It makes little sense to continually discuss the pros and cons of job coaches versus support facilitators, as the job coach model has enabled more than 140,000 individuals to gain and retain competitive employment. Efforts are only now underway to fully determine the effectiveness of natural support approaches. Framing the argument in an either/or manner however trivializes the real problems and hides the fact that supported employment needs to move beyond all current models. New strategies that empower consumers must be identified that enable all individuals with significant disabilities to benefit from employment. To do this, the best components of the job coach model and natural support strategies must be combined, as well as assistive technology, person-centered planning, compensatory strategies, personal assistant services, and many other strategies and approaches. Mank (1994) eloquently notes the following:

Millions of individuals continue to be denied access to high quality employment programs that would enable them to take charge over their careers. The ADA continues to be assailed as an unfunded federal mandate which places burdensome constraints on well-meaning businesses. Finding solutions to these challenges will require a renewal of the spirit of innovation and risk-taking which has been a defining characteristic of supported employment since its inception. In Appendix A is a well detailed program guide on how to establish community and workplace supports. This form can be helpful to employment specialists as they design programs.

Conversion from Day Programs to Community Based Employment

There has been a lot of research and interest in recent years on conversion issues. First, federal funding of systems change projects have resulted in a substantial number of rehabilitation facilities converting staff and other resources (to some degree) in order to increase supported employment opportunities. It is remarkable that over one-third of the respondents to this survey have been able to shift a significant amount of their resources to supported employment in a relatively short time period, and during a very difficult fiscal period. Still, as others have noted (Mank, 1994; Wehman & Kregel, 1995), the degree of change is not that which was hoped for in the 1980s. Segregated vocational services continue to be the predominant mode of service for individuals in need of extended employment support although the numbers of supported employment consumers and providers have increased dramatically since the inception of the program (Wehman & Revell, 1996) so, too, have those for facility-based programs. It is possible that these initiatives have resulted in new providers offering only supported employment; still, in most communities existing facilities are the only avenue of access to supported employment and for the most part they remain committed to segregated services.

Second, the findings suggest that systems change, for the most part, may be a war of attrition rather than a revolution. Many families, rehabilitation facilities, and communities have invested deeply, financially and emotionally, in segregated programs and resist efforts to downsize or eliminate them. For those facilities, the movement toward competitive employment as the option of choice will be long and arduous, and for many perhaps even unattainable. Achieving this goal for consumers requires a much greater overhaul in the way that programs deliver services. True systems change may come about, not from changeover of existing facilities, but from an influx of new stand-alone supported employment providers and new consumers coming into the system who, along with their families, want and expect more than a slot in the workshop or day support program.

Finally, the findings suggest that new methods for increasing supported employment systems capacity may be needed. Systems change funding has resulted

in some change, but in order to reach the next plateau new initiatives will probably be required. For example, it has been suggested that state VR agencies can promote conversion to supported employment through such strategies as fiscal incentives, caps on segregated program slots, changes in licensure and regulatory standards, and increased training and technical assistance (Mank, 1994; McGaughey, et al., 1995; Wehman & Kregel, 1995). Each of these strategies has been initiated in limited numbers of states with limited results. However, as Weiner-Zivolich and Zivolich (1995) write:

> Individuals with disabilities should no longer have to wait in segregation, unemployment, welfare, and poverty, if (facility) management personnel cannot make the required behavioral and managerial changes to implement integrated employment services...Persons with disabilities consistently have stated that they want jobs. Why do they continue to wait, 20 years later, for the segregation industry to hear and respond to this request? Why do we continue to provide changeover consultation for sheltered workshops to help them sort through their own perceived barriers to supported employment integration? (P. 311)

Weiner-Zivolich and Zivolich (1995) suggest that the changeover strategy has reached the limits of efficacy and cost-effectiveness. They offer an alternative method that focuses on funding start-up of supported employment within for-profit businesses. We offer other strategies that might spur true systems change.

Conclusion

This chapter described available vocational placements and models, and the values associated with responsive and quality employment programs. Case studies of young people with disabilities working in the different vocational arrangements illustrate the strengths and weaknesses of each model. As national data indicate, the range of vocational models in place for people with disabilities is increasing (Shafer, Wehman, Kregel, & West, 1990); however, there must be a greater focus on career development and upward mobility into more challenging jobs for people with disabilities.

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Appendix A

Community and Workplace Support Form

Date: _____ Provider ID: _____

Consumer Name: _____ Employment Specialist: _____
SS#: _____ ID Code: _____

Currently Employed? yes ____ no ____
Company Name: _____
Street: _____
City, State, Zip: _____

Date of Placement: ___/___/___ (month/day/year)

Please answer the following questions for each support need. Complete a separate form for each area of need that is identified regardless of whether it is new or one that has been previously addressed.

1. **What type of support is needed or desired?** (check only one)

_____ 1) determining job choices
_____ 2) developing a resume
_____ 3) finding a job
_____ 4) learning how to do the job
_____ 5) remembering how to do the job
_____ 6) orienting around the workplace
_____ 7) completing all regular job duties
_____ 8) being able to perform infrequent duties associated with the position
_____ 9) arranging work schedule/hours
_____ 10) signing in/out at work
_____ 11) calling in sick or late
_____ 12) attending company meetings
_____ 13) taking lunch and/or breaks
_____ 14) receiving a raise or increased benefits
_____ 15) getting along with coworkers
_____ 16) developing friendships
_____ 17) participating in social activities during work hours
_____ 18) finding transportation to and from work
_____ 19) finding transportation not associated with work
_____ 20) getting a learners permit or drivers license
_____ 21) accessing public transportation
_____ 22) learning how to use public transportation (e.g., taxi, bus, subway, etc.)
_____ 23) accessing specialized transportation
_____ 24) making ride arrangements (e.g., coworker, volunteer, friend, family member)
_____ 25) meeting people outside of work
_____ 26) pursuing recreational interests
_____ 27) purchasing/selecting/maintaining uniforms or clothing for work
_____ 28) arranging volunteer opportunities
_____ 29) attending social outings after work hours
_____ 30) participating in programs/activities offered by community or civic organizations
_____ 31) locating a place to live
_____ 32) learning independent living skills
_____ 33) getting up and/or ready for work

_____ 34) picking up/cashing a paycheck
_____ 35) managing money/paying bills
_____ 36) using money/making purchases
_____ 37) applying for SSI, SSDI, or other government subsidy
_____ 38) handling SSI or SSDI issues
_____ 39) using Social Security Work Incentives (e.g., PASS, IRWE)
_____ 40) taking care of personal hygiene and grooming
_____ 41) dealing with substance abuse issues
_____ 42) changing something about the job
_____ 43) attending school/college
_____ 44) addressing sexual issues
_____ 45) pursuing career advancement opportunities
_____ 46) learning how to do something new at work
_____ 47) finding a different or a second job
_____ 48) addressing communication issues
_____ 49) dealing with aggressive, disruptive, or problem behaviors
_____ 50) handling family issues
_____ 51) handling legal matters
_____ 52) addressing/monitoring medical or medication issues
_____ 53) requesting time off from work
_____ 54) addressing fatigue or stamina issues
_____ 55) arranging follow-along job coach services
_____ 56) recording and monitoring work schedule/hours
_____ 99) other _____

2. a. **Has this support need been addressed previously while being served by this program?**

_____ 1) yes
_____ 2) no

b. **If yes, what type of assistance was received?** (Please describe briefly.)

c. **What is the reason for developing another support option?** (check only one)

_____ 1) consumer handled on own and now would prefer outside assistance
_____ 2) new/additional supports were identified/needed
_____ 3) consumer no longer needed assistance/issue reoccurred
_____ 4) consumer chose to stop using the support/has changed mind
_____ 5) consumer preferred to find a different means of support
_____ 6) person providing support was no longer willing/able to continue
_____ 7) support was not successful/did not meet individual's needs
_____ 8) support was too costly/funding no longer available
_____ 9) support or assistance no longer available/situation changed
_____ 10) support was not available/could not be located
_____ 99) other_____

3. **What is the status of this support need?** (check only one)

_____ 1) critically needed immediately
_____ 2) critically needed in the future

_____ 3) possibly need/desired sometime
_____ 4) not needed but desired immediately
_____ 5) not needed but desired in the future

4. a. **What support resources have been identified to address this need?** (Check all options)

Finding a Job

_____ 1) Family/friends assisting with identifying job leads or getting applications
_____ 2) Consumer pursuing job leads and/or picking up applications
_____ 3) Assistance from community employment agencies with resume writing, job leads, getting/completing applications (e.g., State Employment Commission)
_____ 4) Employment specialist assisting with job development activities
_____ 5) Job placement assistance by members of the community, volunteers, civic organizations (e.g., JayCees)
_____ 6) Job placement assistance by school personnel, human service agencies (e.g., vocational rehabilitation, mental health/mental retardation services)
_____ 98) Consumer accompanied to different businesses to find out about the type of job and/or company
_____ 99) Exploring interests and experiences/talking with the consumer and others (e.g., family, rehabilitation counselor, teacher, job coach)

Learning How to Do the Job

_____ 7) Coworker mentoring
_____ 8) New employee training provided by the company (e.g., orientation, videos)
_____ 9) Supervisor training and/or prompting
_____ 10) Employment specialist training
_____ 11) Observing workplace personnel perform the job (e.g., coworkers, supervisor)
_____ 12) Retired person/company employee providing training
_____ 13) Standard company training procedures expanded/modified/extended
_____ 14) Restructuring job duties, making accommodations, developing compensatory strategies
_____ 15) Coworker training and/or prompting
_____ 16) _____

Assistance with Completing the Job

_____ 17) Coworker assisting, training, and/or prompting
_____ 18) Modifying job duties/arranging a work routine
_____ 19) Purchasing something to make job easier/better (e.g., toys, lock, raincoat)
_____ 20) Employment specialist training
_____ 21) Modifying/changing work hours
_____ 22) Utilizing a self-monitoring strategy (e.g., checklist, flip cards, diagram)
_____ 23) Consumer handling it on his/her own (e.g., asking, using natural cues)
_____ 24) Utilizing external cues (e.g., pictures, color code)
_____ 25) Supervisor assisting, training, and/or prompting
_____ 26) Making job accommodations, utilizing compensatory strategies/assistive technology

Addressing Work-Related and Nonwork-Related Issues

_____ 27) Consumer doing it on his/her own (e.g., making arrangements, self-monitoring)
_____ 28) Employment specialist assisting, training, arranging, and/or supporting
_____ 29) Family members assisting, arranging, monitoring, and/or supporting
_____ 30) Supervisor/employer arranging, prompting, training, monitoring, and/or supporting
_____ 31) Company providing and/or managing (e.g., direct deposit, programming timeclock)
_____ 32) Community or civic organization providing assistance and/or information
_____ 33) Human service agency providing assistance, information, and/or services (e.g., vocational rehabilita-

tion, independent living center, MH/MR services)

_____34) Friend or advocate assisting
_____35) Self-managing behavior, walk away, re-direct anger
_____36) Member of the community or volunteer assisting
_____37) Training or classes through a school or human service agency (e.g., residential services, MH/MR, independent living center, technical center)
_____38) Establishing/modifying work hours, job duties, and/or break routine
_____39) Residential staff prompting and/or assisting
_____40) Arranging a flexible work schedule/hours and/or time off
_____41) Coworker prompting, assisting, training, and/or monitoring
_____42) Utilizing an external cue (e.g., alarm watch, color code)
_____43) Utilizing a compensatory strategy (e.g., list of names & numbers, letter with blanks, posting schedule, contract, calendar book)
_____44) College or university students assisting/tutoring
_____45) Training and/or advocacy with coworkers, employers, the community, etc.
_____46) Training and/or role playing with the consumer
_____47) Help from a paid personal assistant
_____48) Counseling (e.g., individual/family, private/public)
_____49) Consultant or specialist assisting (e.g., private company, independent business, Social Security specialist)
_____50) Receiving medical treatment/services (e.g., physician, neuropsychologist)
_____51) Receiving legal assistance/services (e.g., lawyer, public defendant)
_____52) Participating in peer and/or community support groups
_____53) Training or classes through a community or civic organization
_____54) Participating in community activities/events
_____55) Exploring interests, opportunities available, and support resources
_____56) Enrolling in college or university courses/program
_____57) Teaching personal hygiene and/or grooming
_____58) Purchasing something (e.g., extra keys, alarm clock, radio, razor)
_____59) Contacting people, friends, others with similar interests
_____60) _____

Arranging Transportation

_____61) Family member or relative drive
_____62) Walk
_____63) Take a taxi
_____64) Friend, neighbor, community member, volunteer/hired person drive
_____65) Use specialized transportation
_____66) Carpool or ride with a coworker
_____67) Ride a bus
_____68) Drive self
_____69) Ride a bicycle
_____70) Attend driving school
_____71) Family member train and/or assist
_____72) Employment specialist train, assist, and/or drive
_____73) Receive assistance with purchasing or repairing a car
_____74) Utilize a compensatory strategy (e.g., list of phone numbers, availability)
_____75) Assistance and/or services from a community or civic organization
_____76) Assistance and/or services from a human service agency

Other

_____77) _____
_____78) _____

b. **Which support resources has the consumer chosen to use?** (Place the corresponding number of the support resource identified in the above question in the blank beside the primary choice of the consumer and any other options that are being used concurrently or as an alternative or back-up support option.

_____ 1) Primary
_____ 2) Concurrent or alternate/back-up
_____ 3) Concurrent or alternate/back-up
_____ 4) Concurrent or alternate/back-up
_____ 5) Concurrent or alternate/back-up
_____ 6) Concurrent or alternate/back-up

5. **What type of support option has been selected?** (check only one)

_____1) Employer or Workplace Support (e.g., assistance provided by the consumer, employment specialist, or workplace personnel to address work or work-related issues at the job)
_____2) Community Support (e.g., assistance provided by the consumer, employment specialist, or community to address work-related or nonwork-related issues outside the workplace)
_____3) Transportation Support (e.g., assistance provided by the consumer, employment specialist, workplace, or community to address transportation issues to and from work or not related to work)
_____4) Recreation and Social Integration Support (e.g., assistance provided by the consumer, employment specialist, workplace, or community to address social and recreational issues with coworkers or persons outside the workplace after work hours)
_____5) Personal and Independent Living Support (e.g., assistance provided by the consumer, employment specialist, workplace, or community to address personal, independent living, and residential issues outside the workplace)

6. **Who has primary responsibility for arranging or accessing the support?** (check only one)
_____ 1) Consumer
_____ 2) Parent/Family Member
_____ 3) Friend/Acquaintance/Neighbor
_____ 4) Employment Specialist
_____ 5) Rehabilitation Counselor
_____ 6) Case Manager
_____ 7) Teacher
_____ 8) Workplace Personnel
_____ 9) Residential Staff
__ __99) Other: _____

7. a. **Does the support require someone to function in the role of provider?**

_____ 1) yes
_____ 2) no

b. **If so, who is the primary person?** (check only one)

_____ 1) Consumer
_____ 2) Supervisor
_____ 3) Coworker
_____ 4) Other workplace personnel
_____ 5) Parent/family member/spouse
_____ 6) Friend/acquaintance/neighbor
_____ 7) Member of the community

_____ 8) Student
_____ 9) Volunteer
_____ 10) Tutor
_____ 11) Retired person
_____ 12) Consultant/specialist
_____ 13) Rehabilitation counselor
_____ 14) Teacher
_____ 15) Case manager
_____ 16) Employment specialist
_____ 17) Community/civic agency representative
(name: _____)
_____ 18) School
_____ 19) Business
_____ 20) Residential staff
_____ 21) Human service agency representative
(name: _____)
_____ 99) Other: _____

8. **What has been the role of the employment specialist in addressing this support need?** (Check all that apply)

_____ 1) Identifying support options
_____ 2) Contacting support resources
_____ 3) Assisting consumer with choosing type of support
_____ 4) Helping/training consumer to access/use the support
_____ 5) Advocating
_____ 6) Training person providing support
_____ 7) Working together with the consumer and support provider
_____ 8) Overseeing the support arrangement
_____ 9) On-going monitoring of support
_____ 10) Providing additional support as needed
_____ 11) Providing the support (continued)
_____ 12) Employment specialist not involved
_____ 13) Making support arrangements
_____ 14) Making alternative arrangements if support breaks down
_____ 99) Other: _____

9. a. **Are any costs associated with providing the support?**

_____ 1) Yes
_____ 2) No

b. **If so, what is the approximate amount?** (Round off to the nearest dollar)

$_____

c. **Who is the primary funding source for the support?** (check only one)

_____ 1) Supported employment program
_____ 2) Employer
_____ 3) Consumer or his/her family
_____ 4) Vocational rehabilitation
_____ 5) School
_____ 6) Private business (other than the employer)
_____ 7) Community or civic organization/agency
(name: _____)

_____ 8) Social Security work incentives (e.g., PASS/IRWE)
_____ 9) Human service agency
(name: _____)
_____ 99) Other: _____

10. Who is primarily responsible for overseeing the on-going monitoring of the support? (check only one)

_____ 1) Consumer
_____ 2) Parent/family member/spouse
_____ 3) Friend/acquaintance/neighbor
_____ 4) Employment specialist
_____ 5) Rehabilitation counselor
_____ 6) Case manager
_____ 7) Teacher
_____ 8) Workplace personnel
_____ 9) Support no longer needed/short-term
_____ 10) Residential staff
_____ 99) Other: _____

Table 9.8. Community and workplace support form (From Parent, W, Gibson, K., Unger, D., & Clements, C. (1994). The role of the job coach: Orchestrating community and workplace supports. In P. Wehman & J. Kregel (Eds.), New directions in supported employment (pp. 12-18). Richmond: Virginia Commonwealth University, Rehabilitation Research and Training Center on Supported Employment, Natural Supports Transition Project.

Discussion Paper

Pursing Postsecondary Education Opportunities for Individuals with Disabilities

Elizabeth Evans Getzel, Robert A. Stodden, Lori W. Briel

The passage of the Americans with Disabilities Act (ADA) in 1990 (PL 101-336), along with the recent reauthorization of the Individuals with Disabilities Education Amendments of 1997 (PL 105-17), has led to an expanding social awareness of accessibility and disability issues. Legislative and social changes have also led to increased numbers of students with disabilities seeking access to colleges, universities, and vocational technical programs (Adelmen & Vogel, 1992; Blackorby & Wagner 1996; Benz, Doren, & Yovanoff, 1998; Bursuck & Rose, 1992; Fairweather & Shaver, 1991; Henderson, 1995; Stodden, 1998). The number of postsecondary students reporting a disability has increased dramatically, climbing from 2.6% in 1978, to 9.2% in 1994, to nearly 19% in 1996 (Blackorby & Wagner, 1996; Gajar, 1992,1998; Wagner & Blackorby, 1996). Since 1990 there has been a 90% increase in the number of colleges/universities, technical institutions, community colleges and vocational technical centers offering opportunities for persons with disabilities to continue their education (Brinckerhoff, Shaw, & McGuire, 1992; 1993; Bursuck & Rose, 1992; Pierangelo & Crane, 1997). Nonetheless the enrollment of people with disabilities in postsecondary institutions is still 50% lower than enrollment among the general population. This gap in educational attainment significantly affects the long-term employment prospects for persons with disabilities.

Impact of Postsecondary Education on Employment

Over the past twenty years changes in the nation's labor market have increased the importance of having a postsecondary education in order to be able to compete in the job market. Whether it is college, adult and continuing education, or technical preparation, postsecondary education plays a major role in preparing persons for employment and career opportunities (HEATH-VR, 1996). Students who continue their education after high school maximize their preparedness for careers in today's changing economy as they learn the higher order thinking and technical skills necessary to take advantage of current and future job market trends.

Research demonstrates that persons with disabilities are negatively and disproportionately affected by changes in general employment trends (Yelin & Katz, 1994a; Yelin & Katz, 1994b). In recent studies, older men with disabilities experienced a higher rate of decline in labor force participation rates than older men without disabilities (Yelin & Katz, 1994a). Similarly, persons with disabilities experienced a larger relative drop-off in employment in manufacturing than persons without disabilities, while also experiencing a larger relative increase in employment services (Yelin, 1992; Yelin & Katz, 1994b). Thus it appears that people with disabilities, as with other minority groups, face labor market liabilities which often place them in the position of being the last-hired and the first-fired (Trupin, Sebesta, Yelin, & LaPlante, 1997; Zemsky & Oedel, 1994). Indeed, findings indicate that disability may combine with gender, age, and race to place some persons with disabilities at a greater disadvantage in the job market (Yelin & Katz, 1994a; Reskin & Roos, 1990).

Access to Postsecondary Education

With these poor employment figures for

persons with disabilities, access to postsecondary education becomes that much more critical. A clear positive relationship between disability, level of education and adult employment has been firmly established (Benz, Doren, & Yovanoff, 1998; Blackorby & Wagner, 1996; Gilson, 1996; Reis, Neu, & McGuire, 1997). Gilson (1996) documents that the completion of some type of postsecondary education, including vocational education, significantly improves the chances of men and women with disabilities to secure decent and meaningful employment. In fact, employment rates for persons with disabilities demonstrate a stronger positive correlation between level of education and rate of employment than we see in statistical trends for the general population (Stodden, 1998).

In 1996, the U.S. Bureau of Census statistics indicated labor force participation rates at 75.4% for persons with less than a high school diploma, 54.6% for those with a diploma, 87.8% for persons with some postsecondary education, and 89.7% among persons with at least four years of college. Proportionately, these labor force participation rates increase even more sharply when compared to increasing levels of education and persons with disabilities. Deplorably, only 15.6% of persons with less than a high school diploma currently participate in today's labor force. However, this participation doubles to 30.2% for those who have completed high school, triples to 45.1% for those with some postsecondary education, and climbs to 50.3% for people with disabilities with at least four years of college (Reskin & Roos, 1990; Yelin & Katz, 1994a, 1994b). As Gajar, Goodman, & McAfee (1995) cautions, for individuals with disabilities, a university education is highly correlated with vocational options and financial success. Therefore, the cost of failure, both to these individuals as well as to society is a pressing concern (p.384-85). Gajar's observation reinforces the necessity to:

(a) focus attention on overcoming barriers to employment for people with disabilities,

(b) identify educational accommodations and supports, including assistive technologies that promote this population's successful completion of postsecondary education programs.

As documented previously, higher education has a significant impact on the career attainment of individuals with disabilities. This chapter will explore the current trends in postsecondary education for individuals with disabilities. Critical factors in successfully transitioning from secondary to postsecondary programs will be discussed in addition to best practices in educating students with disabilities seeking advanced degrees.

Preparing Students with Disabilities for Postsecondary Education

To ensure that students with disabilities are prepared to enter postsecondary education programs, transition planning plays a key role in actively working with students with disabilities to promote their success in higher education. Successful transition planning extends beyond meeting the academic requirements for admission. Planning efforts must also include direct skills instruction in self-advocacy, independent living, decision making, and working with students to identify career goals to help them establish a career and make future choices for education and training (Aune, 1991; Sitlington & Frank, 1990). Students with disabilities who participate in relevant transition planning are a strong predictor of participation in postsecondary education (Halpern, Yovanoff, Doren, & Benz, 1995). Another strong predictor of postsecondary participation is a student's satisfaction with his or her high school instruction (Halpern et al., 1995). Even though a greater understanding has been gained about the participation of students with disabilities in postsecondary schools and potential predictors for their participation, there still remain considerable issues and concerns about how well these students are prepared to manage their education beyond high school.

Postsecondary Transition Issues Faced by Students with Disabilities

Although many postsecondary education programs are increasing the attention and support given to students with disabilities, success in these settings, for the most part, remains dependent on the individual qualities of the student (deFur, Getzel, & Trossi, 1996). Students are responsible for a number of activities that were provided by secondary schools. In higher education, students with disabilities are responsible for documentation of a disability, assessment information, programming, advocacy decision making and transition planning once they enter college (Brinckerhoff, Shaw, & McGuire, 1992). However, the

stigma attached to the need to self-identify for special attention, drives some students to elect not to disclose their disabilities in order to avoid being labeled disabled when on campus (Lynch & Gussel, 1996). Unfortunately, students who fail to identify themselves as disabled are often unable to access many of the supports designed to get them closer to having equal (rather than special) access to education (Gordon & Keiser, 1998).

Even though students with disabilities have increased responsibilities in college, this does not imply that postsecondary education institutions do not have a continuing responsibility to work with students to ensure access to needed support and services. Postsecondary education institutions should take a stronger role in educating instructors regarding disabilities and students' rights to course modifications and other accommodations (West, Kregel, Getzel, Zhu, Ipsen, & Martin, 1993). Yet the supports and services provided by postsecondary institutions are relatively new and, thus, not yet well known by faculty members (Mellard, 1994; Minskoff, 1994). Faculty and other stakeholders, thus, may find it difficult to accommodate students simply because they lack an understanding of the student needs or familiarity with campus services (deFur & Taymans, 1995; Scott, 1996).

Although there has been an increase in the number of students with disabilities entering colleges and universities, limited numbers of students are completing their programs (Wille-Gregory, Graham, & Hughes, 1995). There are several factors that contribute to low retention and completion rates (Aune, 1991) which make it exceedingly challenging for individuals with disabilities to complete postsecondary educational programs. In many instances, students' unique needs go unrecognized or unmet (Aune, 1991; Reiff & deFur, 1992; Brinckerhoff, 1994). In other instances, students may be hampered by varying or limited support services, large student-instructor ratios, and limited direct student-instructor contact which result in insufficient individualized attention (Stodden, 1999). Additionally, students with disabilities in higher education settings often face obstacles in the form of negative or prejudicial attitudes held by faculty members, administrators, and other members of the student body (Greenbaum, Graham, & Scales, 1995;West et al., 1993).

To help students with disabilities prepare for their transition to higher education, three primary areas of consideration emerge when creating a planning process: exploring postsecondary education settings, identifying skills needed by students for a successful transition, and setting career goals. This section of the chapter will discuss these areas and suggested planning activities

Exploring Postsecondary Education Environments

Postsecondary education programs are offered in a variety of settings including trade or business schools, vocational-technical schools, community colleges, and specialized training in business and industry (HEATH Resource Center, 1989; Wille-Gregory, Graham, & Hughes, 1995). Effective planning and preparation are needed to ensure that students with disabilities do not feel overwhelmed and unable to complete their advanced education program. This includes learning those skills necessary to deal with both academic and social challenges presented by postsecondary programs (Wille-Gregory, et al., 1995). This preparation needs to include obtaining the necessary knowledge and skills to enhance students' self-determination and self-evaluation skills, identification of postschool transition goals, and selection of appropriate educational experiences (Halpern, 1994). For students with disabilities, the selection of a disability-friendly campus is critical to the long-term success and involves a more in-depth investigation and consideration than the usual checklist of college programs that most non-disabled students consider (Navicky, 1998).

Students with disabilities and their families need to use a variety of methods to obtain information about postsecondary programs. It is important for students to explore a variety of postsecondary options to determine what best meets their educational and training needs. Wille-Gregory and colleagues (1995) have suggested several areas to consider. Information from colleges should be reviewed to understand the training or coursework offered and the diversity and size of the student body, and the school's community (both academic and social environments). In addition, individuals with disabilities and their families need to explore the level of support programs that are offered. Typically minimal, moderate, or intensive categorizes support programs (Brinckerhoff, Shaw, and McGuire, 1993; Mooney, 1996). A minimal program offers general academic support services and developmental classes. Moderate programs have coordinated services

and students are completely included in their academic studies. An intensive program has specific developmental component, a self-advocacy component, and specialized counseling.

General background information can be obtained through the Internet using either a specific college web site or a web site that is designed to provide information on a number of colleges. However, in-depth research will be needed to obtain specific information about the programs and supports that will meet an individual's need. If possible, individuals with disabilities should visit potential schools and find out more about available support services and the school's physical accessibility. And most importantly, inidividuals considering a particular school should talk with students with disabilities about their experiences. Listed below are some suggested areas to consider when visiting a program or reviewing information about it (Wilson, Getzel, & Brown, in press).

1) Campus Climate: Is the campus atmosphere generally accepting of student with differences in learning styles? Are students considered in the planning process and encouraged to participate fully in a variety of campus-life activities?

2) Program Philosophy: Is there a specialized area of emphasis associated with the services? Is there emphasis on learning strategies, remediation or social skills?

3) Awareness and Support: Is the school administration and faculty aware of the needs of students with disabilities and the adjustments that will help meet these needs? Is there good communication between all parties with whom the student will rely on for support?

4) Academic Adjustment: How are academic adjustments coordinated? Are there specialized accommodations such as note takers, real-time captioning, and readers/scribes for examinations?

5) Waivers and Substitutions: What is the procedure and is assistance available with this procedure? What kind of documentation is required? What is the probability that waivers and/or substitutions area granted?

6) Course Load and Graduation Time: Is it possible to maintain a reduced course load? Do students with disabilities generally take longer to complete the requirements for graduation? Is priority registration available for students with disabilities?

7) Tutorial Support: Is it scheduled or on an as-needed basis? Is tutoring provided by peers or professional staff? What is the tutor-student ratio? Does the staff receive continual professional development?

8) Student Support Activities or Groups: Are there ongoing groups that meet to talk about issues or concerns related to their experiences on campus? Are there specific activities designed to assist students with disabilities to network with other students on campus? Are there student leadership/mentoring programs to help students feel connected with other students with disabilities on campus? Is there a campus disability advocacy or advisory group that students can join to provide input concerning issues on campus?

Another excellent resource to assist students with disabilities transition from high school to postsecondary education settings is college support personnel. Often these representatives have very little involvement during the transition process (deFur, Getzel, & Kregel, 1994); however, these individuals can provide an important link to postsecondary environments. Scott (1996) has suggested some activities that college personnel can provide to support students with disabilities during the transition process, and once students have arrived on campus. Suggested transition supports are summarized in the table below.

Transition Support Activities

Local activities to assist in transition planning:

- Brochures with information on specific campus services
- College fairs spotlighting campus disability supports and services
- Presentations at high schools by college support staff about college services
- Student speaker's bureaus made up of college students with disabilities
- Campus visits by high school groups, including

tours guided by college students with disabilities

- Summer orientation programs on college campuses for rising high school juniors and seniors
- Workshops for high school students to develop skills

Transition programs to assist in campus adjustment:

- Summer orientation for all entering students
- Additional summer orientation programs specifically for entering students with disabilities
- Freshmen orientation classes provided for the general student population
- A special section of freshmen orientation designed to address disability specific needs

Identifying Skills Needed by Students for a Successful Transition

Self-awareness, self-advocacy, and autonomy contribute to feelings of self-determination (West, Barcus, Brooke, & Rayfield, 1995). Self-determination skills can encompass a number of psychological and behavioral attributes including goal setting, choice, creativity, and independence (Ames & Ames, 1985; Deci, 1980; Durlak, Rose, & Bursuck, 1994). These skills can be particularly helpful to youth entering postsecondary education (Durlak et al., 1994). Students with disabilities who have successfully made the transition to postsecondary schools exhibited: 1) an awareness of their strengths and weaknesses both academically and socially in addition to compensatory strategies, 2) an ability to discuss their accommodation needs with faculty and staff, 3) an awareness of services and supports available to them, and 4) an ability to access information, services, or supports when needed (Aune, 1991; Bursuck & Rose, 1991; Durlak, 1992; Siperstein, 1988).

Unfortunately, students with disabilities are often unaware of the goals established in their IEPs or see little relevance to their education and future goals (Lovitt, Cushing & Stump, 1994; Morningstar, Turnbull, & Turnbull, 1996). Active participation in the IEP is, therefore, essential to the development of skills of self-determination both by the meeting itself as well as the goals and services developed as a result of the IEP. The IEP process offers students the opportunity to practice applying skills of self-advocacy and choice in a safe environment and it provides an opportunity for them to develop an awareness of their strengths and needs (deFur, et al, 1996). Each of these is critical to developing self-determination. Exercising personal choice options also empowers and enhances a willingness to persevere. Table 2 provides suggested areas for developing or increasing students' self-determination skills.

Developing self-determination skills through the IEP process (Table 2)

- Provide opportunities for students to learn about their strengths, needs, and interests.
- Provide opportunities for students to practice self-advocacy skills, for example, discussing modifications on IEPs with mainstreamed teachers.
- Develop 'mock' IEP meetings to provide students the opportunity to understand the meeting process, who attends, and their role in discussing what is included on their plan.
- Assist students in developing a summary sheet of their interests, strengths, and choices to discuss at the IEP meeting.

Project SMOOTH, Chesterfield County Public Schools, 1994.

Setting Career Goals for Successful Transition Planning

It has been suggested that a number of college students with disabilities have high career aspirations, but have low expectations of ever accomplishing these goals (Babbitt & Burbach, 1990). These authors concluded that students with disabilities tend to exhibit a greater uncertainty about their career choice then their peers without disabilities. These students may be uncertain about their strengths and limitations and how these fit with different career choices. With postsecondary education as a primary transition goal, secondary transition planning may neglect the attention needed for career guidance (deFur, et al, 1996). Career guidance services for students as they move

through the transition planning process can help them to better understand what postsecondary options can best meet their needs. Career planning of individuals with disabilities requires a partnership between the student, education, and community-based services, including vocational rehabilitation.

School guidance counselors play an important role as a member of the IEP team. Programs offered at specific colleges and the advice and support of teachers and guidance counselors have been identified as extremely important factors in helping students with disabilities decide which college to attend (Henderson, 1999). School counselors can assist students with disabilities assess postsecondary opportunities and can work with students, families, and special education staff to develop career goals and help to develop a framework for postsecondary education plans. Without an overall context provided by a career objective, a student's ability may be limited in the identification of specific supports and services needed to achieve his or her goals (deFur, Getzel, & Kregel, 1994). Students with disabilities have similar career development needs as their peers without disabilities; however, students with disabilities have additional factors which need to be considered during the career development process (Ettinger, 1995). Some of the issues which counselors can assist students explore include:

1. Disclosing a disability - Students need to discuss what they think about this issue and how they will deal with during the application phase or once they enter a college or university. Students need to explore their comfort level with disclosing their disability and what methods would be best for them (Ettinger, 1995), for example, seeking assistance from the disability services office on campus or speaking directly to a professor on their own.

2. Understanding their disability - Students with disabilities must be able to understand their strengths and how their disability impacts their learning (Wille-Gregory et al., 1995). It is important that they are able to effectively communicate their specific support needs. For students with disabilities this means that in order to be able to access, participate and perform successfully in postsecondary education programs, they must be able to link any accommodations they may require due to their disability to their course of study (Brinckerhoff, 1994). One method that can help students to achieve this is enabling them to be an active participant in their career planning process and providing them opportunities to explain their learning difficulties in the educational setting (Wille-Gregory et al., 1995).

3. Exploring career goals. Students with disabilities often lack exposure to the variety of career options and the skills that are required. Students with disabilities need to have work experience during high school to help develop social interaction skills and to further explore vocation interests (Reiff, Ginsberg, & Gerber, 1995). These opportunities will assist students in better determining their postschool goals and what type of postsecondary education setting can best meet their needs.

4 Learning about technology available to students - Student with disabilities need access to information about assistive technology and services. By utilizing these supports, students should explore what opportunities are available to participate in advanced courses or training (Lewis, 1998; Raskind & Higgins, 1998).

Students with disabilities have a number of decisions to make when selecting a postsecondary education program. It is important that students make informed choices about the postsecondary setting which best meet their needs. Gathering specific information about educational programs and the level of support they provide, along with talking to other students and visiting programs are just some examples of the process involved in making this decision.

Adjusting to Postsecondary Education Programs

Ted is a 24 years old transfer student after completing a semester at two different community colleges. He experienced a traumatic brain injury several years ago and had little understanding of how his injury impacted his life. Ted elected to live on his own in an apartment near campus. He was not certain about his career goal but thought he wanted to become a journalist and planned on majoring in English. He felt it was important that he attended a four- year college program.

At the university, Ted registered with the Disability Support Services and requested accommoda-

tions from his instructors. These included tutors, note takers, and extended time for assignments and exams. During the course of the semester, Ted discovered he had difficulty with reading comprehension and keeping up with his assignments. It was a challenge to write an essay for an exam or a paper for an assignment. His time management skills were inconsistent and sometimes he did not remember when an exam was scheduled or arrived late for class.

After completing his first semester, Ted was placed on academic warning. His advisor told him about the Students with Disabilities Association on campus. He went to a meeting and met a student who also experienced a traumatic brain injury. This student was able to talk with Ted about his coping strategies and share information about other resources on campus. Ted was connected to the university writing center, and learned about regularly scheduled mini-workshops on topics like test taking strategies, time management, and maximizing memory skills. He also was informed about the university career center and decided to complete some interest assessment instruments and participate in individual career counseling.

Enrolling in a postsecondary program involves a series of decisions that include identifying academic programs that can meet the personal, educational, and career goals of students with disabilities (Henderson, 1999). As in the case of Ted, there were several decisions and planning issues that he needed to deal with prior to entering a university, which could have helped him in his adjustment to college life. However, he was able to locate individuals and resources on campus to help him meet some of the challenges that he faced. Once students have made their decision and have started their advanced degree program, they must be prepared to face new challenges as they adjust to a different environment and educational process than secondary education. As previously discussed, students with disabilities will be in an environment where typically there is less student-instructor contact, where classes meet less frequently, and the services and supports they need will be their responsibility to obtain. Although much of the adjustment that a student will experience will depend on a number of factors once they enter the program, and would therefore be difficult to plan for, however students with disabilities can increase their chances of successfully adjusting to college life if they are adequately prepared. This section will highlight three areas that are important considerations as students enter postsecondary schools. Students will need to understand the range of accommodations available on campus and how to access them, the use of assistive technology devices, and the importance of achieving their goals and self-monitoring their progress through the use of time management strategies. These areas have been identified based on the feedback of students with disabilities attending a four-year university who were asked to provide advice to incoming freshmen about college life. Highlights from the advice they offered are provided below.

Students' Perspectives on College

About Preparing for College:

- It's important to learn how to type.
- You need to know how to wash clothes, iron, sew, and clean a bathroom.
- You will have to learn to sleep with noise and lights.

About Studying:

- There is no one to remind you to do homework.
- You need to learn how to allocate your time.
- The best place to study is an empty academic building.

Things Your Learn About Yourself:

- You must take things as they come.
- There is no brother, sister, mother, father to get mad at when things go wrong.
- You must learn how to be on your own and make your own decisions.

About Learning:

- The most efficient way to learn is to attend every class.
- It is important to learn how to think and solve problems.
- Make sure to contact Disability Services no later than two weeks into the semester to arrange accommodations.

- Immediately establish open communication with professors.
- Don't be afraid to ask questions. Some of the best sources of advice come from deans, advisors, and professors.

Adapted from Taking Charge of Your College Life, Old Dominion University, 1997.

Accommodations on Campus

Access to services and supports while students are attending a two or four-year school is vital to the successful completion of their program. Students with disabilities need to know the process on their campus for requesting the accommodations that are needed. In a study of the concerns, needs, and satisfaction with services of students attending 36 two and four year colleges and universities in Virginia (Virginia Commonwealth University, 1993), nearly a quarter of the respondents indicated a need for information about service availability. Other frequent responses included a need for career counseling and placement services, program modifications, assistive technology devices, and personal skills training (for example, budgeting, time management, and organizational skills).

To assist in learning about available services and resources, students with disabilities should take advantage of orientation sessions that are available during the summer or early in the school semester. An increasing number of colleges and universities are setting aside time during the general orientation for students with disabilities to meet with college staff to learn about resources on campus and to network with other students. Some colleges have also developed seminars or courses to assist students in learning more about their disabilities and the accommodations they need (HEATH, 1999; Skinner, 1998). Another good resource to obtain information about services is disability support groups that are organized through the college's Disability Services Office. Once again, this offers students an opportunity to talk with other students about effective accommodations that they have used and the availability of services on campus. It is important, however, that students understand that obtaining accommodations is a two-way street (Scott, 1991). The college or university has a responsibility for providing an accommodation, yet it is a student's responsibility to request it early enough in the semester to make sure that the school is able to develop and implement what is needed.

Use of Assistive Technology Devices

An assistive technology device can be broadly defined as any technology with the potential to enhance the performance of individuals with disabilities (Lewis, 1998). Students who will be using assistive technology need to begin exploring and using these devices before entering a higher education program. Students with disabilities who begin working with devices while in high school will be able to prioritize assistive technology requirements that they will need post high school and can explore postsecondary programs to determine what devices can be used to gain access to information (Getzel, Flippo, Wittig, & Russell, 1997).

Fichten, Barile, & Asuncion (1999) found that increasing numbers of students with disabilities are entering postsecondary education using technology, especially computers, and that an increasing trend is for students to "cross-use" technologies. This means for example that software, which reads what is on a screen, is used not only by students with visual impairments but also by students with learning disabilities. However, all too frequently students with disabilities are not fully aware of the range of technology devices available and their potential use to increase learning. Some colleges and universities have begun to address this issue by including presentations about technology during college fair nights or other special college night programs. College students with disabilities are invited to speak to students about the use of technology and what is available on local campuses. These types of activities along with continuing to educate college faculty and staff on the uses of technology in their instructional setting, can help individuals with disabilities entering postsecondary education to benefit from available technology while in college (Fichten, et al, 1999).

Use of Time Management Skills

By far one of the most critical skills that all students attending postsecondary programs need is time management. This is especially true for students with disabilities who often enter programs with inadequate organizational and study skills (Skinner, 1998). It has been suggested that one approach for increasing skills necessary for postsecondary education programs is to begin replicating some of the demands that college places on students while they are still in

high school (Brinckerhoff, 1996). This strategy will assist students with some of the academic challenges they will face, but one of the biggest challenges faced by students is the social and environmental changes of college, where students have more independence and freedom (Brinckerhoff, Shaw, & McGuire, 1992). Time management becomes a critical skill to help students balance their academic studies and social activities. Strategies for managing time in postsecondary programs focus on strategies and techniques which encourage students with disabilities to monitor their study habits and to understand the types of resources or supports they will need to meet their course load requirements (Eaton, 1996; Hildreth, 1995; Manganello, 1994; Peniston, 1994;Vogel, 1997). An example of these strategies has been suggested in the form of a checklist that students with disabilities can use to continually self-monitor their time management skills in college (Eaton, 1996). Students should check to see if they are:

1. Using a daily/weekly/monthly planner to keep well organized.
2. Locating a place to study that is suitable to their learning style and is using this location on a consistent basis.
3. Using the college library.
4. Locating tutoring services on campus if needed.
5. Studying on the average of two to four hours daily.
6. Monitoring their progress closely to determine if their course load is to heavy and if taking fewer courses in the future would be beneficial.

Conclusion

For individuals with disabilities, an advanced degree from a university, community college or technical school can significantly impact their vocational options and financial success. As discussed in this chapter, there is a series of decisions that need to be made in order for individuals to select a program which best meets their academic and personal needs. It is vital that the students who are transitioning to postsecondary education make informed decisions based on information gathered from a number of sources. Students with disabilities who are able to successfully enter and complete postsecondary education will have an increase chance of fulfilling their long-term employment potential in careers of their choice.

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2001
Preparation of Youth with Disabilities for Participation in Postsecondary Education & Lifelong Learning

Discussion Paper

Transition: Linking Secondary and Postsecondary Education with Employment

Paul Wehman, Ph.D

Tim never read well and had problems with handwriting since he was in first grade. When he entered the fourth grade, the teacher decided that he needed help in both of these areas, so she began to work with him during class. When she began, she was sure that the extra work would help, because Tim seemed to be motivated to improve his reading. As she worked with him, she noted that he would often say one word when he meant another. Also, sometimes his thoughts were confused, and he was unable to communicate as clearly as the typical fourth grade child. It became apparent that the extra work did not help, so in desperation, the teacher approached the special education teacher to discuss having Tim tested.

Rita is a cheerful 19-year-old girl who has a significant cognitive disability requiring intermittent support. Rita exhibits some unusual behaviors such as eye pressing and body rocking when she is nervous or agitated and occasionally has seizures, which she keeps under control with medication. She was institutionalized between the ages of 5 and 8 but now lives at home with her parents and an older brother. Rita is currently enrolled in a class for students with multiple disabilities in her neighborhood high school, where she is learning skills, such as self-help, work, and community mobility skills, that will enable her to be more independent.

At school, Rita is involved in community-based instruction, meaning she and other classmates learn necessary skills in the community rather than the classroom. Currently, Rita participates in biweekly shopping trips, eating out at restaurants, and a half-time placement at a jobsite. Because of Rita's age, she and her parents are looking into possible work and residential settings for the future.

Consider the tremendous challenges Tim and Rita will face as they enter adulthood. In this chapter we present different approaches to help Tim and Rita and millions of other young adults like them adjust to the challenges which society places on youth as they grow up. There are millions of young people with disabilities in the United States and a significant number of them are in middle and secondary schools. Table 1 shows the distribution of these children in 1997. Across the country, these young people with disabilities are leaving the public schools and looking for postsecondary opportunities in community colleges and the work force, searching for their rightful places in the community. Table 2 shows the number and percentage of students aged 17 and older leaving school with a diploma or certificate of completion. The unemployment rate for people with disabilities continues to hover between 50% and 75%, an unacceptable and discouraging figure reaffirmed by a 1998 Louis Harris

Table 1

Number of Children Ages 6-21 Served Under IDEA by Disability: 1987-88 and 1996-97

	1987-88		1996-97		Change	
Disability	Number	%	Number	%	Number	%
Specific Learning Disabilities	1,942,304	47.1	2,676,299	51.1	733,995	37.8
Speech or Language Impairments	953,504	23.1	1,050,971	20.1	97,467	10.2
Mental Retardation	588,770	14.3	504,025	11.6	-6,745	-0.8
Emotional Disturbance	372,380	9.0	447,426	8.6	75,046	20.1
Multiple Disabilities	79,021	1.9	99,636	1.9	20,615	26.1
Hearing Impairments	56,872	1.4	68,706	1.3	11,994	20.9
Orthopedic Impairments	46,956	1.1	66,400	1.3	19,436	41.4
Other Health Impairments	69,058	1.1	180,824	3.1	114,766	249.2
Visual Impairments	22,821	0.6	25,834	0.5	3,013	13.2
Autism	*		36,101	0.7	36,101	
Deaf Blindness	1,454	<0.1	1,266	<0.1	(188)	11.8
Traumatic Brain Injury			10,378	0.2	10,378	
All Disabilities	4,130,214	100.0	5,235,952	100.0	1,115,738	27.1

* Reporting on autism and traumatic brain injury was required under IDEA beginning in 1992-93.
Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS).

TABLE 2

Number and Percentage of Students Ages 17 and Older Graduating with a diploma or Certificate of Completion: 1995-96

	Number	Percentage
Specific Learning disabilities	97,139	32.9
Speech or language impairments	4,043	38.5
Mental retardation	23,728	22.6
Emotional disturbance	13,753	24.0
Multiple disabilities	2,378	13.5
Hearing impairments	2,816	31.7
Orthopedic impairments	1,994	27.4
Other health impairments	3,275	28.2
Visual impairments	1,136	32.1
Autism	397	10.4
Deaf-blindness	51	16.5
Traumatic brain injury	514	27.8
All disabilities	151,224	28.9

Source: U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DANS)

and Associates Poll. It has become increasingly clear to professionals in the disabilities field and concerned family members that the only way to improve the integration of young people with disabilities in life's mainstream is to emphasize greater work opportunities and postsecondary access to college. Consequently, public schools must critically self-examine their curriculum offerings.

This chapter also focuses on how to build connections throughout the community for young adults with disabilities. Businesses, community colleges, recreation centers, and places to live are all key connections to facilitate transition. In this chapter we ask: why do some students, regardless of level and/or type of disability, do well at work? What are the characteristics of students with disabilities who do well in college? Why do others perform poorly? We are interested in studying all young people not only those with disabilities. The days of exclusively identifying vocational programs for people with disabilities as isolated from business, industry, and the work force, in general, are gone. And people are finally realizing that transition issues apply to all students.

For too long, young people with disabilities have been treated as a separate group, segregated from "normal" people and excluded from the curricula, service delivery, and postsecondary opportunities for youth without disabilities. However, if optimal ways to a smooth transition into adulthood are to be discerned, the work opportunity and likelihood for successful integration into the community for all students must be examined. What follows in this chapter is a description of the goals, challenges, and benefits associated with the transition process.

Life's Goals: Helping Kids Know What They Want and How to Get There

One of the single must important aspects of helping young people attain happiness, success and competence in their life is the process of helping them set goals. This has often been spoken about and sounds at times trite, but the ability to help a child understand the importance of identifying and meeting small to medium size targets in their life can make all the difference in the world to how they face different situations. For example, the 16 year old who has never worked before and is afraid of being alone in the work environment might set a goal for working 3 days a week for a total of 15 hours in a familiar workplace environment in their community. As a recent Wall Street Journal (Stout, 1999) noted even menial summer jobs can really pay off for students. Stout (1999) notes: "Even in the new economy, basic work at a classic summer job can't be beat for teaching responsibility, resourcefulness and empathy (p. B-1)." This target would be meaningful in the sense that it would allow the person to develop work skills, follow instructions from a supervisor, have to interact with coworkers and above all develop the work ethic and have a purpose on a day to day basis. The establishment of goals is a learning process. Very few children, or for that matter, teenagers are able to independently set goals without some guidance from the parent, a teacher, a mentor, or someone else in their life that they respect and that can give them some realistic direction about the difference between right, wrong, and what is an appropriate action to take under different circumstances. Setting goals is a process that is a critical planning to go to college and/or competitive employment. Knowing, for example, that a 2 year or 4 year college is a viable goal to shoot for, will directly influence the teachers, guidance counselors, and parents in the curriculum planning process. Essentially, transition planning is futures planning, and in order to plan for the future you must have some sense of what goals makes sense and what goals do not make sense.

For example, consider Bob. Bob has a learning disability, a mild speech impairment and Attention Deficit Hyperactive Disorder. He is 15 years old and comes home from school every day watches television

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and then has dinner with his mom or dad before watching more television again. He has no chores, no job, is on no sports teams, and does not have any specific goals. Bob's mom and dad are extremely busy with their careers and have not been able to make the time to help him structure what he is going to do with his life. Should it be surprising that Bob is beginning to get progress reports home from teachers indicating that he is a behavior problem? Should it be a problem that Bob is becoming listless around the house and indifferent to the authority of his mother or father? Should it be surprising that Bob doesn't want to go to school any more and has no interest in going to college. These are the problems that are faced by thousands of young people who are labeled with disabilities. This is not an issue about lacking potential. This is about not having goals set and follow through with.

Most parents know from experience the best way to help their children obtain a higher level of achievement is to set goals in a stairstep fashion that they can achieve and feel good about. In transition there are home living goals, vocational goals, career advancement goals, academic goals, and many other categories of goals that need to be thought out and which require planning (e.g., Wehman, 1997).

The way that educators and parents together can help students establish goals is by utilizing the Individual Education Planning process (IEP) and create meaningful transition planning through IEPs. The Individual Education Plan is required by federal law (IDEA)

P.L. 105-17, 1997). More importantly, it needs to be the foundation for a transition blueprint into the future. Students who have already achieved, students who have a purpose in their life, students who know how to set goals, and students who have been reinforced for those goals are much more likely to exceed in the world of work and living in the community than those who have not. The importance of ongoing reinforcement, by adults and teachers by educators and parents, as well as others in the community for doing positive activities will go a long way towards making the successful transition from youth to adulthood. What we have learned over the past decade is that no amount of paper programs, interagency agreements, or even new teaching techniques will help a young teenager grow into a successful adult without being cognizant of the role of setting goals and then being reinforced for the completion of those goals. Once again these goals need to be performed in a successful way over a extended period of time.

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Defining Transition

Much has been written about transition within the past two decades

(Syzmanski & Parker, 1995). Transition from school to adulthood may be defined as the life changes, adjustments, and cumulative experiences that occur in the lives of young adults as they move from school environments to more independent living and work environments. Examples of transitions include changes in self-awareness, body, sexuality, work and financial needs, and the need for independence in travel and mobility. Successful transitions also increase success, confidence, and competence in one's work skills.

Transition was defined in 1994 by the Council for Exceptional Children, Division on Career Development and Transition, as the following:

Transition refers to a change in status from behaving primarily as a student to assuming emergent adult roles in the community. These roles include employment, participating in post-secondary education, maintaining a home, becoming appropriately involved in the community, and experiencing satisfactory personal and social relationships. The process of enhancing transition involves the participation and coordination of school programs, adult agency services, and natural supports within the community. The foundations for transition should be laid during the elementary and middle school years, guided by the broad concept of career development. Transition planning should begin no later than age 14, and students should be encouraged, to the full extent of their capabilities, to assume a maximum amount of responsibility for such planning. (Halpern, 1994, p. 116)

IDEA 1997: Implications of the Transition Requirements

In 1997, Congress passed Individuals with Disabilities Education Act Amendments of 1997 (IDEA, P.L. 105-17). The IDEA Amendments of 1997 serve to amend the Individuals with Disabilities Education Act of 1990 with final published in the March 12, 1999 (Federal Register Vol. 64, No. 48, pp. 12406-12672). Several sections of the regulations pertain to the transition of students from school to adult life which are (Section 300.1):

The purpose of this part is:

(1) To ensure that all children with disabilities have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for employment and independent living; this should culminate into an Individual Education Plan.

(2) To ensure that the rights of children with disabilities and their parents are protected;

(3) The explicit statement that special education and related services are intended to prepare students for employment and independent living makes it clear that educators, parents and students must consider adult outcomes as they plan for students' school experiences (Authority: 20 U.S.C. 1400).

The definition which is used Section 300.29 follows:

As used in this part, transition services means a coordinated set of activities for a student with a disability that–

Is designed within an outcome oriented process, that promotes movement from school to post-school activities, including postsecondary education, vocational training, integrated employment (including supported employment), continuing and adult education, adult services, independent living, or community participation;

Is based on the individual student's needs, taking into account the student's preferences and interests; and

Includes–

Instruction;

Related services;

Community experiences;

The development of employment and other post-

school adult living objectives; and

If appropriate, acquisition of daily living skills and functional vocational evaluation.

(2) Transition services for students with disabilities may be special education, if provided as specially designed instruction , or related services, if required to assist a student with a disability to benefit from special education.

At a minimum, the IEP team should consider each of the areas including instruction, community experiences, and development of employment and other post-school adult living objectives. In many cases, each of these areas, and possibly some others, will be included in students' IEPs. However, while the previous regulations associated with the 1990 Individuals with Disabilities Education Act required that IEP teams provide a written statement describing the basis upon which any of the first four transition areas were not included in the IEP, the present regulations do not require this to be included in the IEP. Transition services may be provided by the education agency or, as outlined in Section 300.348 of the regulations, by agencies outside the school. In either case, they must be written into the IEP and the responsible agency noted.

Societal Opportunities Which Empower Youths with Disabilities

As we move into the new millennium, it is clear that there are probably more opportunities to help young people be successful than may have ever existed before in this country. There are an extraordinary number of positive things which have evolved seemingly at warped speed which all open up the door for much greater possibilities socially, vocationally, and psychologically for young people in this country. If they have access and choose to draw upon the available resources. There are more jobs, more opportunities to travel, more opportunities to go to college, and more diverse and exciting ways to recreate than ever before. The exploding level of knowledge opens up many new doors for those who have the capacity and drive to take advantage of these opportunities. Lets discuss some of these in more detail.

Internet

Wehman first wrote about the Internet and transition in an earlier edition of Life Beyond the Classroom, (1996) and discussion was then related primarily to assistive devices that could be used to help persons with disabilities, and in the context of assistive technology. What a difference five years makes. It is very clear that the Internet has become much more than an assistive technology tool. The Internet is a prime form of electronic communication, often compared in magnitude to the Industrial Revolution of 1990s. It is the way that people in business, home, and community increasingly communicate with each other. Over 100 million people utilize instant messaging services through America Online. They will use electronic mail, they will make travel reservations, they will find jobs, they will meet new people, and they will learn new skills both academically and vocationally through the Internet. What the baby boomers used as children in the form of Encyclopedia Britannica to do their research studies, the youth of America use the Internet. Companies such as American Online currently play a major role in the lives of over 20 million subscribers right now and as we go to press there is an increased utilization of handheld devices such as cell phones and pagers which will allow for Internet application. Furthermore, business is using the Internet to do business with each other at a rapid speed—young people will have to know how to use the Internet (Tully, 2000).

Guptill (2000) describes how the Internet can be utilized to improve student performance. She suggests a search of the Web can be used to draw associations between prior knowledge and new information and also help in classifying information. In Table 3 she provides an excellent sample lesson plan.

Table 3

Sample Internet Lesson Plan

The Structure of Matter	Grade 8

Unit Goals:

- Students will analyze the structures of matter by accessing their Hyperstudio stack titled "The Structure of Matter" and finding 3 Web sites that provide supporting information.
- Utilize Language Arts Skills-Complete Web site evaluation forms for 3 Web sites. Use information to prepare a newspaper article on the structure of matter. Send a copy of the completed collaborative classroom. Respond to feedback and provide feedback to your collaborative partner.
- Prepare a multimedia presentation using your findings and the findings of your collaborative partner.
- Students will utilize technology skills-accessing programs, evaluating Web sites, toggle between programs, collaborate with other classrooms, prepare multimedia presentation.

Length of Unit: 8-12 days

Students should be able to:

- Classify objects by their properties
- Understand that matter exists as 3 states: solids, liquids, gases
- Understand the difference between chemical change and physical change (demonstrated through the newspaper article and presentation.)
- Successfully collaborate with partner and provide feedback
- Prepare and present multimedia presentation
- Respond to questions from classmates and collaborative partner

Materials:

- Classroom computer lab with Internet access
- Software: Hyperstudio
- Web site evaluation form
- Technology necessary for assessment
- Web addresses for collaboration with other classrooms

Note: Adapted from lesson presented by Joan Jerome School District 261 (1999). Available http://www.d261.k12.az.us/tech/index.htm

Guptill, A. M. (1999) Using the Internet to improve student performance. Teaching Exceptional Children, 32 (4), 18-20.

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Why is this so important for people with disabilities? As it becomes increasingly clear economically to makers of software as well as hardware devices that people with disabilities are users and purchasers, we will see increasing numbers of application devices that can be modified to empower individuals with cognitive, physical and emotional disabilities to be more independent. The Internet can be a significant equalizer for somebody who wants to start a business and yet is in a wheelchair and cannot usually get to and from work everyday and needs to telecommute. The Internet can be a great equalizer for people who have dyslexia or who have problems with spelling or writing and there will be countless applications in the years ahead.

The question is: are administrators, local government agencies and teachers ready to purchase this equipment, train personnel how to use it, and maximize its utility for students with disabilities? If the answer is yes then there will be a tremendous instrument for empowering their capabilities.

Global Economy

Following closely on the heels of the development of the Internet has been a significant

globalization of the world of labor and business. No longer do different countries conduct business only within their own borders. At what can only be considered a staggering rate, countries around the world are rapidly doing business with each other again through the use of the Internet, computer, fax machines, and high speed long distance telephone lines. Each of these forward looking modern day telecommunication devices are making business more competitive than ever and also generating incredible amounts of different types of jobs in new areas. The amount of technological breakthrough that is occurring across the world is forcing schools and colleges to be more prescient in anticipating what vocational and career needs may be. To date the schools have not had a good history of meeting business and labor needs, but this must change as we move forward into the 21st Century. The globalization of the economy will be a very threatening event for many, but for those who are prepared it will signal a wonderful new era of opportunity. However, as has been noted by many business magazines in recent years, this can be seen as a "golden opportunity" for persons with disabilities to enter the new workforce (Business Week, March 20, 2000).

Better Research About Learning and Performance

There is no doubt that we now know more about how to help people with significant physical disabilities how to work, how to get about in the community and about how to be more physically independent. We have learned how to do this through the use of personal assistance as well as technological advances. We now know more about how to help individuals with severe cognitive and emotional disabilities be more capable in the competitive workplace than ever before. There is more research that has been published on how to help people learn and instructional environments and how to help people perform and a higher rate and how to generalize knowledge from one environment to multiple environments. The federal government has invested millions of dollars in research in these areas. There has also been significant investment made on the use of different medications to help people overcome attention deficit hyperactivity disorder, emotional problems, and enhance hearing and visual disorders. These research and clinical advances are available to those who go to school in environments where teachers are knowledgeable and in communities where there are doctors that can provide the help, but when one considers where we were 20 years ago and where we are today, the amount of information that is available is staggering and this can only be considered positive.

Legislative Advances

The legislative history for young people with disabilities is rich indeed. Beginning with the Education for All Children Act passed in 1975, there have been a series of laws which have been put into place by Congress that can only be considered among the most progressive in the world for empowering people with disabilities. There is legislation that requires that all children receive a free and appropriate public education; there is legislation that provides for rehabilitation services for all eligible people with disabilities in all 50 states; there is legislation that empowers the civil rights of all individuals with disabilities to have free access to telecommunication devices, nondiscriminatory employment opportunity, and physical access in the community in public setting, such as grocery store, apartment buildings, and areas of business. Most recently there has been legislation passed that provides for work incentives to allow people with disabilities to work and not lose social security benefits or health care benefits associated with new levels of competitive

employment. These progression of laws will not always be as coordinated as one might like to see; nevertheless they have provided the foundation for the resources and federal policy towards empowering persons with disabilities. At a certain point, however, no one law can do the job and it comes down to an individual persons' dedication and responsibility to themselves. This is where an effective educator can play a significant role in the transition planning process. As vital as the legislative advances have been, the age period between 12 and 19 is a critical window to reach children and their futures looking process and the day to day educator is in a wonderful spot to help influence this process.

Societal Challenges which Affect Youth with Disabilities

Despite the many wonderful and positive events which have occurred over the last decade and which we can look forward to in the new millennium, it is also true that there are numerous challenges which have been occurring in our society today that we must consider. Special education services for young people with disabilities have all too often been considered in a vacuum from what is going on in the rest of the world. Yet these children live in neighborhoods which are unsafe, they go to school which there is often an unreasonable amount of risk for violence and are subject to intense peer pressure and mandated school curriculum which all has an adverse effect on their life. We cannot consider transition from school-to-adulthood only in the context of special education training, vocational training, and vocational rehabilitation much as we tried to do 10 to 15 years ago. New federal initiatives in career education or new laws passed by congress related to rehabilitation can be helpful but we have clearly seen that these laws are not the answer nor these administrative initiatives ending of themselves.

Therefore, in order to understand the full context of the environment which American youth face as they are growing up, we need to look at a number of the issues which are impending on their daily life. One only has to look at children as they leave elementary school and move into the world of middle and high school to begin to understand the multiple pressures which are effecting the way they behave.

Violence in the Public Schools and Community

It is clear that one of the most critical social issues facing all Americans is safety in that community. We see violence in the home. We see violence in the community and regrettably we are now seeing increasing amounts of violence in the school of all ages. This type of violence as little as a decade ago or before Life Beyond the Classroom was even written, would have never been thought likely or possible except in the most unusual or high risk environments within urban America. Now, however, our children have been exposed regularly to children from 6 to 18 years old being shot and killed during school hours in school environments (Rosenblatt, March 13, 2000). For example Time Magazine (March 13, 2000) notes.

"Whatever one concludes about responsibility, this incident will end as too many child killings have ended in recent years–with mournful speeches and eulogies and civic burial mounds made up of heart shaped balloons, poems, and stuffed animals staring blankly into space. Last week the nation went through the sort of moment that is growing too familiar not only in content but also in the emotions it engenders. On the same day, one could feel heartbroken and fearful that one's children were in danger in their schools, and yet, also, that this is the way life goes these days, and who, after all, can do anything about it." – reported by Julie Grace/Mount Morris Township, Jay Branegan/Washington and Victoria Rainert/New York.

These events are increasingly common and are bound to have an adverse effect on the psychological outlook of children that we are working so diligently to help be more independent.

There are thousands of young people with behavior disorders who are already at risk for greater likelihood of inappropriate social behavior or even violent behavior and when placed in schools and communities that allow this type of behavior to occur are more inclined to further engage in such activity. The Individuals with Disabilities Education Act is supposed to help school personnel in guidelines for how to manage these students; yet as Smith (2000) notes this has been an ongoing and major challenge not yet successfully met. We simply cannot avoid the understanding of the importance of this negative societal development and must combat it with the use of greater communication, safety procedures, anger management classes, counseling and psychological help. Students who come from homes where there is a regular level of verbal and physical violence, as well as neighborhoods that are like this as well, must be identified early on in the educational process for help

and support.

"Guetzloe (1999) writes eloquently on this topic. She notes:

On April 20, 1999, the entire population of our country was shocked by the massacre in Littleton, Colorado. All across the continent, parents, educators, mental health professionals, and lawmakers as asking, "Why?" and "How can such a thing be prevented?"

The number of murders committed by adolescents in the United States has increased in the last decade from approximately 1,000 to 4,000 each year. In many of these cases, there are certain similarities–situations and factors that are known to be risk factors associated with violent and suicidal behavior.

To many, the most horrifying part of the murders is the killers' total disregard for the value of human life–and their apparent enjoyment of the act of killing others (as if they were involved in a violent video game).

It has been said that such young people need a complete emotional overhaul–a restructuring of their emotional development.

Of course, the school alone cannot effect these changes. Effective interventions must address the multiple determinants of such behavior including cognition, neurophysiological problems, and physical health as well as factors related to family, peers, school, community, and the greater society. What will be the keys to survival for youngsters such as these and the rest of us, who may become their victims)?" P. 14

There can be no tolerance of violence in the home and community and there can be no tolerance in the school, Skiba & Peterson (2000). Yet at the same time, immediate and reckless administrative actions for immediate expulsion are not necessarily the answer either. Clearly, early identification and intervention will be the key...we must identify those youth with predisposition to these behaviors very early on (Sprague & Walker, 2000). New strategies in the form of alternatives schools, behavioral intervention, and earlier identification will go a long way towards helping remediate this problem. These issues are discussed more in Chapter 16 on behavior disorders.

Access to Drugs and Alcohol

We are also faced in our society with increasing ease of access to alcohol and drugs for children of all ages in our schools. Once again this is not a new problem, but is one that definitely impinges on the productivity, performance, and safety of young people with disabilities. Most who have little or no idea of what they are becoming involved with. The use of underage alcohol and illegal drugs is not appropriate for any young person, but the risk goes up dramatically with those with disabilities because of the fact that they may be on other medications, do not have the social competence to understand how they may be used in this process and may also form habits and addictions that will further impair their likelihood at vocational and social competence. Once again, early identification of this problem, communication with appropriate social agencies, and vigilant school administration policies can all help to reduce this as a problem.

The fact remains, whether special educators like to believe it or not, that areas such as access to drugs and alcohols in the schools or violence are major issues related to school administration and we must participate in this process both as concerned citizens in the community as well as educators.

Divorce and Family Discord

We have to recognize that approximately one out of two marriages in this country end in divorce and approximately 40% of all families only have one parent in them. Therefore, we are raising a generation of children who do not have the benefit of two parents on a day to day basis; furthermore, in many families where there are two parents there is history of domestic violence, excessive use of alcohol or drugs or in general child negligence. These unfortunate and somewhat dismal facts are inevitably another detrimental factor in the education of youths with disabilities. As children grow up under less than ideal family circumstances, as educators we have to realize that this is a challenge which some of our children face.

Divorce and family discord should not be viewed as an excuse for a child to perform poorly nor should it be viewed as an impossible barrier. The fact of the matter is that there are tens of thousands of children who have grown up to be very successful adults in all walks of life. But this is just one more challenge that a child that may already have communication problems, orthopedic or ambulatory problems or reading or speech problems must have to overcome with that much less of family support. This is not an insur-

mountable barrier but is one that needs to be recognized by all members of the team as they try and help students move ahead.

Poverty

Many children, whether they live in rural areas or the cities, come to school with no health coverage or with limited funds for lunch money or snack money or do not have the types of clothing that their peers do. Poverty has been around for as long as there has been civilization. There are always the haves as well as the have nots, but we cannot consider a viable instructional program for a child who is hungry; we cannot take a child on community based instructional activities if there is no economic assistance or support, and we cannot expect the child to have good self-esteem when he or she comes to school in clothes that are worn out, have holes in them, and are insufficient to meet the child's needs. The issue of poverty cannot be solved by teachers alone, and this should not be an expectation of that. At the same time there are resources in the community, more than ever now, which can be drawn upon by the school social worker, the school psychologist, and other members of the team. Those students who come from very low income homes need to be identified and at risk as at risk children for learning and we must be aware of this as a negative factor in their development (Adams, March 12, 2000).

Emphasis on School Reform and Testing

Within the past decade, there has been a rising emphasis in the part of many of the governors in the states of this country to reform education in such a way to place greater emphasis on testing competence in core academic areas such as science, civics, foreign language, mathematics, and language arts. As commendable as this powerful state and federal mandated emphasis is on school reform and testing, it places undue hardship on thousands of students with disabilities who need reasonable accommodations to take tests, but more importantly, need a different curriculum area of focus than what core academic areas are being presented. For example, students with moderate cognitive disabilities may not need to know or will not perform in a likelihood very well on algebra and geometry competencies. They would benefit more from functional math skills to be successful in the community and in the workplace. However, if they do not pass these test they will not have the ability to receive a high school diploma in many states. This so called educational reform has been a major barrier for thousands of teachers who are trying to empower students to be more independent in the community and has reached a point where it truly has to be considered a societal challenge for young people with disabilities.

Continual Chronic Unemployment of Persons with Disabilities

The herculean efforts of thousands of rehabilitation professionals, well meaning advocates and legislatures, the unemployment of persons with disabilities through the 1990s has continued to be stubbornly caught in the 65 to 70 percent unemployed category. This is an extraordinarily high figure when one considers that according to the Louis Harris Poll (1998) that two out of three people that are unemployed with disabilities indicate that they would be willing to work. McMillan (2000) notes:

"Only three out of 10 people with developmental disabilities have jobs–meaning that the unemployment rate is 70 percent for the 1.2 million Americans of working age who have a developmental disability, compared with a U.S. national average of 4.1 percent.

The rate is higher for those with developmental disabilities which typically involve some type of mental retardation and possibly physical problems, such as with cystic fibrosis." p. 1

Furthermore, this has occurred despite the unemployment rate of the economy for a number of years has hovered in the low 4% area and more jobs have been created in the last decade than in any decade in American history. Some have suggested this problem has occurred due to job discrimination (McMorris, March 10, 2000) but there are too many reasons with which are too complicated to identify only one issue. These may include discrimination, perceived incompetence, policy issues, transportation issues or all of the above, the fact remains that this is a major societal barrier—there is no protracted history of individuals with disabilities pouring into the workforce in a meaningful way and subsequently is going to require a significant change in attitude and policy.

Peer Pressure

A final area to consider as societal challenge is one that has been with all children over all of time and that

is peer pressure. As children become older, there is greater and greater emphasis on how you look, how you talk, who you spend time with, what your skills are, how much money you have, and, in general, what type of person you are perceived to be. As children move into middle school, this need for peer affiliation really begins to show itself and by the time highschool and college arrives the self-esteem that is derived from these types of peer relationships is either significantly developing or has not. Young people with disabilities have consistently had poor self-esteem and one reason for that is because of poor peer relationships. It is not uncommon for a 14 year old with a reading disability and dyslexia who may have some mild speech dysfunction to be made fun of by children that are in his class or during lunch. This type of teasing is not uncommon and the issue is not whether or not it will occur because it will, but rather how well the student is able to manage his or her anger towards it and find other friends that will be more positive. As Bill (1999) notes:

"Teasing is often part of the school experience. It lies along a continuum that ranges from friendly bantering to bullying, and harassment. *Teasing* involves pestering or making fun of someone. *Bullying* is when someone is cruel or overbearing toward another person who may be weaker physically or mentally. Bullying is also the constant teasing that makes life miserable at school. *Harassment* is the most severe of the three and involves severity, persistence, and pervasiveness of the behavior.", p. 8

The very nature of disability is to be different at least on a initial face level. Children with disabilities are different in their reading ability sometimes, other times on the way they talk, and yet other times in terms of the way they think or walk or behave emotionally. Any of these behaviors or lack of confidence in them can lead to some very unpleasant peer pressure, teasing or humiliation. Educators need to be aware of how to help students compensate for these differences. The inability to manage one's feelings about being excluded and controlling their anger or becoming unnecessarily depressed are key aspects of adolescent development that we cannot ignore as we go forward in the educational planning process.

Transition to Adulthood for Youth with Disabilities

Young people with disabilities face many different types of transitions that must be successfully approached in order for students to be able to move beyond them into a stable adulthood. The following seven are the most common transitions that youth with disabilities face:

1. Employment
2. Living arrangements
3. Getting around the community
4. Financial independence
5. Making friends
6. Sexuality and self-esteem
7. Having fun

Employment

Most young people, regardless of disability, have concerns about what they will do after they finish high school. But not knowing how to find a job and lacking specific vocational skills that lead to employment are added sources of anxiety for people with disabilities. Without some form of employment, departing students are immediately dependent upon their parents or society, in the form of Social Security allowances. In addition, studies show that U.S. business and industry greatly value attitude, communication skills, and work experience when deciding to hire young people leaving school-assets to which many students with disabilities are never exposed. Perhaps these shortcomings explain the discouraging results[1] presented by Louis Harris and Associates (1998) regarding the employment of people with disabilities:

1. Two thirds of Americans with disabilities between the ages of 16 and 64 are not working.
   - Two in 10 (20%) are working full-time, and 11% are working part-time.
   - As in 1986, it is true that "not working is perhaps the truest definition of what it means to be disabled" (Louis Harris and Associates, p. 81).
2. The overwhelming majority of unemployed people with disabilities in the working-age population want to work.
   - Fully 79% of unemployed people with disabilities age 16-64, including 84% of

people age 16-44, say they would like to have a job.

- The proportion of these unemployed working-age people who want to work has increased by 13 percentage points, rising from 66% in 1986.

3. Adults with disabilities who are working are employed in a range of occupations:

   - Sixteen percent hold professional or managerial positions or are proprietors.
   - Fourteen percent are service workers.
   - Thirteen percent are clerical or sales workers.
   - Twelve percent are unskilled laborers or farmers.
   - Seven percent are skilled craftspeople.

These proportions are not very different from the employment patterns of employed people without disabilities.

4. Most adults with disabilities who are working or are willing and able to work (69%) do not need special equipment or technology in order to perform effectively at work; one quarter (26%) of these adults do need special equipment or technology.

5. A substantial minority of people with disabilities who are employed or are willing and able to work confront discrimination, unfavorable attitudes, and physical barriers in the workplace.

   - Three in 10 have encountered job discrimination.
   - Two in 10 have encountered physical barriers in the workplace.
   - Almost half of working-age people with disabilities who are not working believe that employers are insensitive to people with disabilities.

6. In this same poll, however, Americans also indicated that their attitudes toward integrating people with disabilities into all aspects of life, including employment, are more open and positive than ever before-an encouraging trend in a period marked by serious economic recession.

The ability to be employed upon leaving school, therefore, is important for at least three reasons: 1) working in competitive employment provides an opportunity to receive wages and benefits that lead to greater independence and mobility in the community at large, 2) being productive on a daily basis in a meaningful vocation is critically important for one's self-esteem and dignity, and 3) establishing new friendships and networks of social support in the community is facilitated by having a job.

Hence, the first aspect of transition that teachers, service providers, rehabilitation personnel, family members, and others should focus on is reducing students' anxiety over unemployment and economic insufficiency by effective occupational training. This should occur through real jobs (i.e., paid employment in local business and industry) while the students are still in school.

Living Arrangements

The second aspect of transition most individuals concern themselves with involves their postschool living arrangements. They ask questions such as, "Must I always live with Mom and Dad?" and "Will I have to live in a room by myself?" These are very important questions that significantly influence the way people look at themselves and the types of friends they have.

Burchard, Hasazi, Gordon, and Roe (1991) looked at lifestyle normalization, community integration adjustment, and personal satisfaction for 133 adults with mental retardation requiring intermittent to limited support living in small group homes. The study indicated that people who lived in supervised apartments achieved the most typical lifestyles. They had greater personal independence and community integration and reported levels of lifestyle satisfaction and personal well-being similar to that of people living with their own families. More recently, Emerson, Robertson, Gregory, Hatton, & Kessissoglou, Hallam, Knapp, Järbrink, Walsh, & Netten (2000) conducted an indepth study in this area. The costs, nature, and benefits of residential supports were examined for 86 adults with mental retardation living in village communities, 133 adults living in newly built residential campuses, and 281 adults living in dispersed housing schemes (small community-based group homes and supported living). Results indicated that (a) the

adjusted comprehensive costs of provision in dispersed housing schemes were 15% higher than in residential campuses and 20% higher than in village communities; (b) dispersed housing schemes and village communities offered a significantly greater quality of care than did residential campuses; and (c) there appeared to be distinct patterns of quality of life benefits associated with dispersed housing schemes and village communities, with both approaches offering a greater quality of life than did residential campuses.

Getting Around the Community

A third aspect of transition is mobility (West, Hock, Wittig, & Dowdy, 1998). The ability to move around both within the community and in and out of the community is often taken for granted. Most people drive automobiles or have access to public transportation or friends who can help them to get around. Independent movement in the community is critical for going to movie theaters, convenience stores, grocery stores, parks, church, and work, as well as for feeling independent. One of the great difficulties that people with disabilities face is a lack of independent mobility.

Consider the case of Kirk. Kirk is a 16-year-old student with emotional disturbance and mental retardation requiring intermittent support. He has only recently been reenrolled in a public school after completing a year of court-ordered therapy in a private rehabilitation setting for his outbursts of anger. Academically, Kirk reads on about a beginning third-grade level and does math at the fourth-grade level. He has visual perceptual impairments and experiences great difficulty in reading charts, schedules, or graphs.

Kirk has experienced many failures in his prior educational programs. On his return from his out-of-school placement, he was anxious to begin a job training program. The school's Education for Employment (EFE) teacher helped Kirk locate a job training program at a local restaurant. The restaurant manager participated as a member on Kirk's individualized education program (IEP) team, along with Kirk's parents, the EFE teacher, a vocational rehabilitation counselor, Kirk's probation officer, and Kirk.

Kirk's duties at the restaurant include making coffee and cleaning. He has mastered the basic skills, likes his job, and is well-liked by his fellow workers. The primary obstacle has been transportation to and from work, initially, the EFE instructor provided transportation, but this arrangement could not continue indefinitely. The IEP team convened to resolve the problem. After considering several possibilities and the limitations that each posed, the team arrived at a workable plan:

- Kirk's supervisor would fix Kirk's work schedule at 5 days a week, 7:00 a.m. - 2:00 p.m., to limit transportation difficulties.
- Kirk would carpool with the manager of a video store next door to the restaurant.
- Kirk would require training to walk independently from his home to the carpool pickup point approximately three blocks away.
- The EFE teacher and Kirk's mother would collaborate on this training, gradually fading their presence as Kirk showed that he could walk to the pickup point safely.
- His stepfather's work schedule enabled him to pick up Kirk at the end of his work shift to take him home.

Lack of mobility can be caused by ambulation problems or inaccessibility of public places. More often than not, however, lack of mobility is caused by the person's inability to drive an automobile or to obtain a driver's license or having a limited number of friends who are able to drive. Lack of mobility may also reflect living in an area without public transportation.

Financial Independence

Economic self-sufficiency is a major goal that most citizens desire-individuals with disabilities are no different. Unfortunately, education does not help students learn financial planning, investment strategies, or the basic knowledge necessary to evaluate the quality of retail sales and merchandising. Not surprising is that individuals with disabilities are among those most vulnerable to scams and unfair marketing practices.

Financial/income security transition goals should rank in importance just behind employment and postsecondary education transition goals, especially when considering that the majority of money spent on disability in the United States is on Social Security payments and medical assistance. Individuals with disabilities need to be educated in their rights and entitlements as related to these payments. Although

the details of Social Security regulations are almost too complex to understand, an individual should know how to get help and resolution to specific questions. In 1995, the Social Security Administration made available an excellent resource, Graduating to Independence, for students who need information on Social Security.

Financial planning and income security involve a range of issues from the simplistic, such as money management, saving money, and making purchases, to more complex topics, such as estate planning, using credit, or long-term financial planning. For example, consider Laura, 21 years old, whose parents have saved $250,000 for her. They may decide, upon discussion with the education team, that an annual structured annuity payout over the next 40 years will be most advantageous to Laura. The transition plan should reflect this type of specificity. Remember, the plan needs to be a blueprint that sufficiently integrates all major aspects of the student's life

Making Friends

Peer relationships and making friends are a fourth aspect of transition. Beginning in the late 1980s, the transition literature has increasingly stressed the importance of and need for friendships in the lives of people with disabilities. In addition, there must be sensitivity to the changing nature of peer relationships as students move from middle school to high school, and then out of high school into adult environments. Once in adult environments, young people are expected to be increasingly independent in identifying friends, socially networking with people, and initiating social activities. Obviously, some people are better and more successful than others in developing such relationships. However, this is clearly a cause of stress and anxiety for many people with disabilities who have not been sufficiently empowered to have a network for meeting people.

Gilson and Gilson (1998) describe a brief case study about two women Martha and Jenny have workstations next to each other. They are both in their twenties, are very particular in the way that they dress, and have personal mementos decorating the space around their computers Both have been hired part time to do data entry. During break time conversations, the two women have found that they share a passion for finding bargains when shopping for clothes, and both are waiting for "Mr. Right" to come into their lives. On Saturdays, Martha and Jenny often meet at the mall, shop for a few hours and then eat lunch at the food court. Jenny then goes home to her apartment which she shares with a roommate and two cats. Martha goes home to a building which she shares with ninety-nine other people who have varying degrees of physical, sensory, and cognitive disabilities. When each of the young women were asked who they consider their friends to be, both Martha and Jenny, without hesitation, named each other first.

Joblessness, poor living quarters, and/or restricted mobility are factors that can inhibit peer relationships. Developing new friendships, maintaining old friendships, and meeting the challenge of changing peer relationships are critical aspects of transition for all people with disabilities.

Sexuality and Self-Esteem

The development of sexuality and self-esteem is a fifth aspect of transition. As most teenagers grow into adulthood, they begin to establish their own values. Their confidence levels and how they choose to interact with members of the opposite sex are very important in establishing good self-esteem. People express sexuality, both in dating formats and in groups, through their clothes, hairstyles, and recreational activities. Too little attention has been paid to this important transition; but with increased focus in this area, some of the other transitions will fall into place more smoothly.

Having Fun

Finally, simply having fun and appreciating life constitute the sixth aspect of transition. There have been many wonderful materials and curricula developed that reflect age-appropriate leisure activities (Kelley & Frieden, 1989; Moon, 1994; Schleien, Meyer, Heyne, & Brandt, 1995. The key to selecting appropriate recreation goals hinges on the following criteria:

- What recreational interests does the student demonstrate and are these interests consistent with his or her intellectual and physical capabilities?
- What opportunities are available in the home and local community to actually enjoy this leisure activity?

Participating on the swimming team, walking or jogging, working out in an aerobics class, taking an

arts and crafts class, or learning a game that other friends play (e.g., Super Nintendo) are some examples of leisure goals. Usually these goals are facilitated through local parks and recreation specialists, instead of in the classroom. With insight and creativity, an educational team can find scores of activities in which students can participate; however, planning will be necessary to make leisure options a reality. The use of adaptations for the leisure program and/or materials can also play a major role in identifying viable recreation goals.

Frequently, materials and equipment used in a recreational activity act as barriers to participation as they are usually designed for individuals without disabilities and do not take into account the severe physical or sensory impairments of those with disabilities. Therefore, it is often necessary to adapt or modify the equipment or materials to eliminate these barriers to recreation.

Related Disability Legislation

Congress has put a number of related laws into place in addition to the Individuals with Disabilities Education Act (IDEA) described earlier in this chapter that influence the transition from school to adulthood for young people with disabilities and will be described briefly. Together, they form an important foundation for understanding the transition process.

The Rehabilitation Act Amendments of 1998

The Rehabilitation Act Amendments of 1998 were signed into law as a part of Workforce Investment Act (Public Law 105-220). The Rehabilitation Act governs the Vocational Rehabilitation Program, the federal/state cooperative effort that provides employment services nationally for working age individuals with a disability. Vocational Rehabilitation works cooperatively with Local Education Authorities in serving youth with a disability during their transition period from secondary level education; it is the primary employment support resource for post-secondary level and adults with a disability. The Rehabilitation Act provides federal dollars, matched by state dollars, to all fifty states to give people with a disability the opportunity to obtain employment and independent living assistance as needed.

The Rehabilitation Act Amendments of 1998 provide new opportunities for people with a disability to access Vocational Rehabilitation services and to choose the specific services needed for them to achieve their individualized employment goal. For example, the Amendments require that a trial work experience in the most community integrated setting possible be made available to certain individuals with significant disabilities to help identify the services and supports necessary for them to achieve an employment outcome. Also, recipients of Vocational Rehabilitation Services are to have control over the contents of their Individualized Plan for Employment (IPE) and to have information made available to necessary for them to make informed choices about specific services they will receive. This information includes the cost, duration, and accessibility of potential services; consumer satisfaction with these services; qualifications of potential service providers; types of services offered by potential service providers; and the degree to which services are provided in integrated settings (Federal Register, 2000). Brooke (1999) summarized the key Vocational Rehabilitation service provisions of the Rehabilitation Act Amendments of 1998 as presented in Table 4.

The Rehabilitation Act Amendments of 1998 also provide guidance to Vocational Rehabilitation in its role as a required partner in the State One-Stop delivery system. The One-Stop system is the foundation for the federal workforce education and training programs with the intent that individuals and employers seeking workforce development information and services will have a central resource available in each community. Close partnering by Vocational Rehabilitation with the One-Stop programs will assist persons with a disability access a wide range of employment

Table 4

Historical Overview of the Vocational Rehabilitation Act

Time Period Public Law & Policy	Guiding Trends
Middle of the 20th Century PL 113 of 1943; PL 83-565 of 1954; and PL 89-333 of 1965	Medical model with veterans and those who support representing the majority of persons being served. The majority with developmental disabilities are unemployed, live with families whom they are cared for by the state.
Early 1970s PL 93-112 of 1973.	Deinstitutionalization of mentally ill persons primarily for psychiatric disabilities. Beginning of "equal opportunity" with receiving funding. The civil rights of people with disabilities e
Later 1970s PL 95-602 of 1978.	Rehabilitation model is very strong concept with people with earning their way to the next level of least restrictive alternative consumers. Services are concentrated around security, choice safety.
1980s PL 99-506 of 1986.	Functional supports for all persons regardless of the level disability is the new emphasis and becomes the model for rel The old medicine model is judged to be an out of date concept.
Early 1990s PL 102-569 of 1992.	Personal dignity and natural supports represents the p Growing of this period with a clear rejection of professional dom
Late 1990s PL 105-220 of 1998	People with disabilities are speaking out asserting choice control of their career goals and ultimately their lives recognition among policy leaders that systems change need across federal organizations to remove the barriers to emplo people with disabilities.

Brooke, V. (1999). It's up to us: practice and attitudes can not be legislated (Editorial) Journal of Vocational Rehabilitation, 12 (1), 1-5.

support services and information, therefore improving their long term employment outcomes and career mobility.

The Americans with Disabilities Act (ADA) of 1990

On July 26, 1990, President George Bush signed into law PL 101-336, the Americans with Disabilities Act (ADA) of 1990, which many have hailed as a civil rights law for all people with disabilities (J. West, 1992). This act was followed exactly 1 year later by a comprehensive set of regulations (Federal Register, July 26, 1991). These regulations provide for accessibility, nondiscrimination, and greater entrance into workplaces, community facilities, public transportation, and telecommunications. If this law achieves a reasonable degree of successful implementation, young adults should enter a world that is less discriminatory against people with disabilities. More rigorous legislation that reflects advances in medical rehabilitation, vocational rehabilitation, and behavioral intervention is expected to continue to develop as the 21st century approaches.

Already, the law has been increasingly phased in, as the following timeline demonstrates:

- 1990-Congress passed the Americans with Disabilities Act, a comprehensive law that prohibits discrimination on the basis of a disability.
- January 1992-Employers were required to make public areas accessible to people with disabilities.
- July 1992-A portion of the law went into effect prohibiting employers with 25 or more workers from discriminating on the basis of disabilities in hiring, firing, promoting, or compensating employees.
- July 1994-The law was expanded to apply to employers with 15 or more workers.

The United States has developed specific, protective policies and regulations designed to

promote the employment of individuals with disabilities that are very different from those used in most other parts of the industrialized world, which are usually not so defining. In the United States, civil rights laws, specifically the ADA and Section 504 of the Rehabilitation Act of 1973, PL 93-112, protect individuals by prohibiting discrimination in employment on the basis of disability.

Table 5

Questions for Employers Regarding the Implementation of the ADA

X	Do you provide information to job applicants and current employees about their rights under the ADA?
☐	Have you informed managers and supervisors about their responsibilities under the ADA?
☐	Do you recruit from nontraditional sources, including organizations that serve people with disabilities?
☐	Have you reviewed your employment practices and procedures to ensure that they do not discriminate against applicants or employees with disabilities?
☐	Are your interview sites and workplace facilities accessible to people with disabilities?
☐	Do you provide reasonable accommodations for applicants during the selection process and for employees as needed?
☐	Can you identify the essential functions of your jobs, and do your interview questions focus on the applicant's ability to perform them?
☐	Do you administer medical examinations only after an offer of employment is made?
☐	If you have medical records, do you keep them in separate, confidential files?
☐	If you have collective-bargaining agreements, do they support ADA implementation?
☐	Do you involve employees with disabilities in social and recreational activities?
☐	Is your employee benefits program accessible to all employees?

Source: President's Committee on Employment of People with Disabilities (1996)

Under the ADA, employers are prohibited from discriminating against otherwise qualified individuals with disabilities during recruitment, hiring, evaluation, promotion, or any other facet of employment. Employers are further required to provide "reasonable accommodations" to enable individuals with disabilities to successfully perform their jobs, when accommodation can be provided without an employer sustaining an "undue hardship." Reasonable accommodations may include such things as restructuring jobs or work schedules, modifying equipment or providing assistive devices, providing an interpreter or reading aids, or improving the overall accessibility of the worksite. Employers found to be in violation of the law face the same legal penalties as those found guilty of discrimination based on gender or race. Table 5 lists aspects of the ADA that employers must be sure to implement to ensure fair treatment for workers with disabilities.

In the past, laws to end discrimination against minority groups did not specifically include individuals with disabilities. In order to end the unjust treatment of these individuals, the Americans with Disabilities Act (ADA) was signed into law in 1990. The intent of the law was to end discrimination toward people with disabilities throughout society.

The law went on to state that individuals with disabilities continually encounter various forms of discrimination, including outright intentional exclusion, the discriminatory effects of architectural, transportation, and communication barriers, overpro-

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tective rules and policies, failure to make modifications to existing facilities and practices, exclusionary qualification standards and criteria, segregation, and relegation to lesser services, programs, activities, benefits, jobs, or other opportunities. Congress felt that, without this law, people with disabilities had no legal recourse against those discriminating against them. The ADA was intended to break down a wide array of artificial barriers that were unnecessarily and unfairly limiting the employment participation of individuals with disabilities.

The implementation of the employment provisions of the ADA presents a significant challenge to private business, as well as local, state, and federal governments. In 1993, the National Council on Disability (NCD) submitted a report to the President and Congress reviewing the progress made during the ADA's first 2 years of implementation and concluding that employers who were aware of the ADA requirements were making serious efforts to comply with the law (National Council on Disability, 1993). Most large companies appear to have designated an individual to be responsible for ensuring compliance with the ADA and efforts to modify recruitment and hiring processes are well underway in most major corporations. As of 1993, however, some companies (particularly smaller employers) were not aware of all the requirements of the ADA. In many instances, employers have struggled to gain accurate information. The NCD report also indicated that the entrepreneurial activities stimulated by the ADA have led to a proliferation of inaccurate training and technical assistance materials that have adversely affected implementation.

Workforce Investment Act and One Stop Career Centers

The Workforce Investment Act (WIA) is the first major reform of the nation's job training system in more than 15 years. WIA, which supersedes the Job Training Partnership Act, includes the following key components:

- streamlining services through a one-stop service delivery system;
- empowering job seekers through information and access to training resources through Individual Training Accounts;
- providing universal access to core services
- ensuring a strong role for local Workforce Investment Boards and the private sector
- in the workforce investment system; and
- improving youth programs.

With the passage of WIA, local Service Delivery Areas across the country who formerly operated job training programs under JTPA, are teaming with other employment and workforce development partners to establish a one-stop career center system. Some localities have brought in their new partners and expanded on existing career centers already in operation under JTPA. In other localities, existing career centers operated by single agencies have been closed and the WIA funds directed to establishing a new one-stop center with greater collaboration of partners.

How Do One-Stop Career Centers Operate?

Contained within the WIA are four principles that guide the implementation of One-Stop Career Centers: universality, customer choice, integration of services, and accountability for results.

Universality . The intent of the WIA is for all services available through a One-Stop Career Center to be accessible to everyone who uses them. For example, it is hoped that people with disabilities will be able to use the same information resources and services as their non-disabled peers. Similar, non-English speaking citizens will be able to access the services without language being a barrier. Through the One-Stop Career Center, every individual will be able to "obtain job search assistance as well as labor market information about job vacancies, the skills needed for occupations in demand, wages paid, and other relevant employment trends in the local, .egional, and national economy" (Workforce Investment Act Implementation Taskforce Office, 1998).

Customer Choice . Under the WIA, individuals will be "empowered to obtain the services and skills they need to enhance their employment opportunities" (Workforce Investment Act Implementation Taskforce Office, 1998). Through self-directed use of available core services and being able to choose the qualified training program that best meets their needs, customers of One-Stop Career Centers, including those with disabilities, should have increased control in the planning and implementation of their employment and training programs.

Integration of Services. "Multiple employment and training programs will be integrated at the 'street level' through the One-Stop delivery system" (Workforce Investment Act Implementation Taskforce Office, 1998). Although not all of the 154 employment programs that existed in 1994 have been pulled under the One-Stop umbrella, those that can make the most difference in the lives of the greatest number of people have been consolidated. Although attempts have been made at integrating service delivery, the funding mechanisms remain separate for most programs.

Accountability for Results. The WIA specifically identifies performance standards that One-Stop Career Center operators as well as training service providers must meet to continue to receive funding. These indicators include job placement rates, earnings, retention in employment, skill gains, and credentials earned (Workforce Investment Act Implementation Taskforce Office, 1998).

In July, 1998, the One-Stop disability initiative staff of DOL developed a draft vision statement for how people with disabilities will be served in the future through One-Stop Career Centers. The vision is as follows:

All One-Stop Centers throughout the Nation have a seamless coordinated system that provides, by utilizing strategies that are flexible and innovative, the full range of employment, and training services needed by people with disabilities. All services provided in One-Stop Centers are accessible, including those provided through self-service modalities. Persons with disabilities frequent One-Stops (due in part to public outreach efforts targeted at the disability community) feel welcome there, and receive customer-specific, responsive and effective services from staff that are knowledgeable of disability, accessibility and accommodation needs, and community services available to persons with disabilities.

Customers with disabilities have access, due to a coordinated employer service strategy, to a wide range of job openings, resulting in placements at higher skill levels, higher salary and benefit levels, and greater job satisfaction. Employers hire and retain greater numbers of persons with disabilities due in part to the information provided by the One-Stop Center on accommodation, work supports, job restructuring, and other disability specific issues (U.S. Department of Labor, 1998).

The Technology-Related Assistance Act for Individuals with Disabilities Amendments of 1994

The Technology-Related Assistance Act for Individuals with Disabilities Amendments (Tech Act) of 1994, PL 103-218, was signed into law on March 9, 1994, and provides access to assistive technology services and devices for individuals with disabilities of all ages. There are three specific purposes of the Tech Act:

1. To provide discretionary grants to states to assist them in developing and implementing a "consumer-responsive, comprehensive, statewide program of technology-related assistance for individuals with disabilities of all ages"
2. To fund programs of national significance related to assistive technology
3. To establish and expand alternative financing mechanisms to allow individuals with disabilities to purchase assistive technology devices and services

With the passage and reauthorization of the Tech Act, Congress acknowledged the powerful role that assistive technology can play in maximizing the independence of individuals with disabilities. This law emphasizes being responsive to the needs of consumers and has the potential to open many new opportunities for individuals with disabilities and their families to receive appropriate assistive technology services.

The act's state-grants program is intended to be a catalyst for statewide systems change to increase access to appropriate assistive technology devices and services. These funds are to be used to support systems change and advocacy activities, which will increase the availability of, funding for, and access to assistive devices and services (see Chapters 11 and 12).

The Ticket to Work and Work Incentive Improvement Act of 1998

The Ticket to Work and the Work Incentive Improvement Act of 1999 is designed to ensure that many of the country's 9 million disabled adults receiving Medicare and Medicaid keep their benefits after they obtain remunerative jobs. Until the law went into effect, many people with disabilities were faced with losing federal benefits needed to cover their

medical costs if they went to work. Some feared that by taking any jobs that paid even a minimal income, they would be cut off from access to these benefits, which are vital to maintaining their lives.

With the passage of the Ticket to Work and Work Incentive Improvements Act of 1999, a dramatic new era has been ushered into the new millennium of work opportunity for persons with disabilities. At a time when our economy is at record levels, the unemployment rate among working age adults with disabilities remains at approximately 75%. Often people with disabilities have been determined ineligible for Medicaid and Medicare if they work, thus putting thousands of individuals in the position of having to choose between health care coverage and work. When Congress passed the Ticket to Work and Work Incentive Improvement Act (TWWIIA) people with disabilities will now be able to join the workforce without fear of losing their Medicare or Medicaid coverage. This has been the most incredible piece of disability Legislation passed since the Americans with Disabilities Act passed in July 1990. There are many aspects of the TWWIIA which have high impact. What follows below is a brief description of the following critical elements.

Remove Limits on The Medicaid Buy-In Option for Workers With Disabilities.

TWWIIA lets States remove the income limit of 250 percent of poverty (approximately $21,000), allowing them to set higher income, unearned income, and resource limits. This important change allows people to buy into Medicaid when their jobs pay more than low wages but may not have access to private health insurance.

Creates the Option To Allow People With Disabilities To Retain Medicaid Coverage.

TWWIIA creates the option to allow people with disabilities to retain Medicaid coverage even though their medical condition has improved as a result of medical coverage. This act also provides $150 million over 5 years in health care infrastructure grants to states to support people with disabilities who return to work.

Creates A New Medicaid Buy-In Demonstration.

TWWIIA provides $250 million to states for a demonstration to assess the effectiveness of providing Medicaid coverage to people whose condition has not yet deteriorated enough to prevent work but who need health care to prevent that level of deterioration. For example, a person with muscular dystrophy, Parkinson's Disease, or diabetes may be able to function and continue to work with appropriate health care, but such health care may only be available once their conditions have become severe enough to qualify them or SSI or SSDI and Medicaid or Medicare. This demonstration would provide new information on the cost effectiveness of early health care intervention in keeping people with disabilities from becoming too disabled to work.

Extends Medicare Coverage For People With Disabilities Who Return To Work.

TWWIIA extends Medicare Part A premium coverage for people on Social Security disability insurance who return to work for another four and a half years. This means the difference between a monthly premium of nearly $350 (which is about the cost of purchasing Part A and B coverage) and $45.50. Although Medicare does not currently provide prescription drugs that are essential to people with disabilities, this assistance will be available nationwide, even in states that do not take the Medicaid options.

Creates a "Ticket to Work Program."

The Ticket to Work Program will enable SSI or SSDI beneficiaries to obtain vocational rehabilitation and employment services from their choice of participating public or private providers. If the beneficiary goes to work and achieves substantial earnings, providers will be paid a portion of the benefits saved.

Provides of a National Network of Benefits Planning and Assistance

In addition to these specific attributes, there is concentrated efforts at helping persons with disabilities to understand the myriad of benefits available. The fact that beneficiaries and recipients have lacked needed information to make informed decisions to pursue employment has been documented on numerous occasions (O'Day, 1999; Golden, 1999; GAO, 1996). In fact, the passage of TWWIIA has only helped to accelerate the expansion of benefits planning and assistance services and supports being provided to SSA disability program beneficiaries and recipients over the past 15 years. With the growth in integrated employment service delivery and increased national

emphasis on the employment of persons with disabilities the need for access to these types of services and supports and case management has become essential to promoting successful employment outcomes and attachment of beneficiaries and recipients to work (Fletcher, 1997; Leiter, Wood & Bell, 1997).

Themes for Success in Growing Up

As we consider the cornerstones of success for young people as they grow up, we must look at why some adults are so successful and others consistently have difficulties and fail. There are clearly many, many skills which have been contributed to successful persons vs. those who are not successful, but repeatedly we come back to several themes that seem to characterize people who do well in life vs. those who do not. It is important to consider that doing well is not necessarily earning the most money in the highest status job or being the most famous or popular. Success must be defined as a very personal issue and one that relates to how happy one feels about themselves and the impact of their life on others. There are at least five major themes which run through successful transition into adulthood: these are postsecondary education, personal responsibility, self-determination and initiative, social competence, and vocational competence.

Postsecondary Education

Many individuals with disabilities will have difficulty with success in the workplace. They will also have difficulty with social skills and personal self-esteem. One way to overcome that will be education. Yes, earning a Associates or a four-year college Bachelors degree will be an outstanding asset to add to ones résumé, but in the long-term being able to take courses and assimilate new information can make a significant difference to a person with a disability. Adding new skills to one's knowledge base identifying new interests, hobbies, and advocations and making new friends are all mediated in a very effective way through post-secondary education and lifelong learning experiences. There are increasingly significant opportunities available for individuals with disabilities to be able to try different areas of learning and there really is no reason that this cannot occur.

Wilson, et al. (in press) have done leading work nationally in identifying recommendations for enhancing a university climate for students with disabilities. In Table 6 is a series of these recommendations.

For example, we know that students with learning disabilities comprise 25% of all students with disabilities and postsecondary settings (Henderson, 1992). Postsecondary training and education can occur in a number of settings. Examples of programs include junior and community colleges, four-year colleges or universities, technical schools, private school and agencies and other special stations in business and industries. There are a number of areas that will be important for postsecondary education to successfully occur.

Personal Responsibility

Personal responsibility is important for all individuals and all young people in America and is essential for success in college. However, those young people with disabilities, especially the high incidence population with mild mental retardation, behavior disorders, learning disabilities and speech impairment fall into this category. Personal responsibility involves, for example, self-control around members of the opposite sex in a variety of social situations. Financial habits and the ability to save money one has earned represents another area of responsibility. Attending work on time and accepting criticism from a supervisor is yet another illustration of personal responsibility.

Table 6 Recommended Programs and Services

Services and Supports	Primary & Collaborative Organization(s)
Admissions	
X Pre-enrollment Planning & provision of program policy and procedures, information and referral, description of availability of support services, and informal needs assessment.	Admissions Office, OSSD
X Comprehensive Orientation & 1-2 day on-campus orientation designed specifically to address needs and issues relevant to students with disabilities (above and beyond standard student orientation process.)	OSSD, Academic Support Center (ASC)
X Academic Service Planning & Review of preliminary individualized needs assessment and development of short- and long-term service plan for students (possibly in conjunction with the orientation process.)	OSSD, ASC
Academic Advising and Support Services	
X Support Services - Scribes, Readers, Test Aides/Proctors, Sign Language Interpreters, Classroom Assistants, and Campus Attendants	OSSD
X Specialized Accommodations - Computer Assisted Instruction, Adaptive Equipment, Technology Assessment and Evaluation, Taped Textbooks, Mobility Assist	OSSD, University Library Services (ULS), Rehabilitation Research and Training Center (RRTC)
X Training and Advising & Course Selection and Scheduling, Tutoring, Mentoring, Academic Skills Assessment and Training, Self-Advocacy Training	OSSD, ASC, UCS, University Counseling Services (UCS), RRTC
Advocacy and Liaison Services	
X Faculty/Administration, Family/Care Attendant and Community based services & advise, coordinate and provide technical assistance and follow-up regarding modifications, accommodations and other disability related issues	OSSD
Counseling, Assessment and Evaluation	
X Disability-Related Counseling	UCS, OSSD
X Disability-Related Support Groups	OSSD, UCS
X Career Planning	University Career Center (UCC), OSSD, RRTC
X Psycho-educational Testing and Disability Documentation	UCS
Information and Referral Services	
X Miscellaneous Campus-wide Disability-Related Issues & serve as primary source for information and referral regarding special university and community-based services and programs	OSSD
Program Evaluation and Data Collection	
X Process Evaluation & internal monitoring and evaluation of program and service delivery processes for efficiency and effectiveness.	OSSD, RRTC
X Satisfaction with Services & establish method of assessing students, faculty and administrators to ascertain level of satisfaction with services delivered	OSSD, RRTC
X Student/Service Data Collection & develop system of data collection, tracking and assessment of student demographics, service utilization, unmet demand, etc.	OSSD, RRTC
In the provision of most services, the school in which the students' academic major is located would also serve in a primary consultation/coordination role.	

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The list of personal responsibility behaviors is obviously very long, yet as Mithaug (1991) has found it seems to define those students who are to succeed vs. those who will fail after leaving school. Educators must work in collaboration with other members of the educational team and should not concentrate exclusively on the instruction of selected academic skills. They should infuse personal responsibility habits and patterns into the curriculum for youth with disabilities. Certainly teachers cannot take on the role of parents, but they can certainly influence the direction in which students are headed. Gallagher (1994) has astutely noted that the goals in education form are more broadly stated and simply classroom activities and present a direct reflection of the problems that we as a society face. We cannot possibly ignore these societal issues and challenges that our children and families face. We are all part of one society. To provide classroom instruction that functions in a vacuum away from the real life activities, new experiences, and day to day events that influence student behavior will be a flaw in shaping educational programs. The significant news making events of the day are critical material for teaching students with disabilities.

Self-determination and Initiative

Self-determination is the capacity to choose and to have those choices be the determinants of one's actions. The emphasis on self-determination for persons with disabilities can be traced to the independent living and self-advocacy movements that emerged several decades ago. The ability to self-advocate is essential for students with disabilities; they must be able to self disclose their disability and know how to ask for selected accommodation. Most people develop self-determination in childhood and adolescents as they receive greater responsibilities and freedom from their parents and teachers. However, research and children with disabilities tends to show a fewer opportunities to participate in decision making and learning from positive and negative consequences than experience by peers who are not disabled.

Self-determination requires that the young person be provided with the knowledge, competencies, and opportunities necessary to exercise freedom and choice in ways that are valuable to them. There is little doubt that those persons who are self-directed and has personal initiative to be successful have some level of ambition and a reasonable degree of work ethic will inevitability do better in life than those who do not. There is, of course, room for debate as to how much the schools are able to instill these important skills. Certainly the work of Wehmeyer in his Self-Advocacy Curriculum which is described in his following chapter as well as the Transition Handbook developed by Hughes and Carter (2000) are good tools for helping teachers get started in teaching this process, but much of this is related to personal attributes as well; that is, the ability to set a goal and have the personal drive and intensity to meet that goal. This is true whether a person is labeled severely or profoundly mentally retarded and working in the back of a kitchen in terms of how persistent and productive they are or whether the individual is recovering from a spinal cord injury and now must consider a career in computer engineering as opposed to being an airline pilot. Self-determination, self-directness, and personal initiative are key important themes in success for growing up.

Social Competence

The ability to get along with people, the ability to have excellent interpersonal skills, and the ability to be socially competent in a variety of environments many will say are the most important features of success in life. Unfortunately, many young people with disabilities are ultimately unable to achieve this level of competence. The target of utilizing effective social skills and knowing how to behave in a variety of challenging social situations can make for the difference in successful outcomes in the workplace as well as home in the community. Young people who get into fights will not make friends. Young people who are verbally abusive will not end up with effective social relationships with members of the opposite sex. Earlier in the chapter in the discussion related to violence, many of the precipitating factors which lead to violence or similar type of behaviors in the classroom are predicated on poor social skills. Many of these behavioral outbursts and breakdowns occur because of the lack of structure and are triggered by social incompetence. Part of the resolution of this issue within the schools is the administrative issue mainly that of tighter structure but much of it is that some students simply do not know the socially appropriate way to behave. Role playing, counseling, and targeted instruction on certain social skills can go a long way towards overcoming this as a problem. It must first, however, be recognized that this is an issue and a problem.

Vocational Competence

Vocational capacity, employment, and the opportunity to advance in a career is a major underpinning of success in American society. Whether we like it or not we are defined by our earning ability, the type of work that we do, the regularity with which we are employed, the type of environment that we work in and our long-term work potential. America is a capitalist society. It is a country that expects people to be productive in work, and, in fact, in recent years there has been a heightened increase on productivity in the workplace. The use of the Internet, automation, greater efficiencies in the workplace, and technology are all seen as ways to empower workers. Individuals with disabilities must become competent. They must take courses, upgrade themselves continually, and be highly persistent in the ability to secure employment. For the most part, teachers in middle and secondary schools have not done a good job at enhancing vocational competence. There has been much to much emphasis on academic skills and relatively little on employment. This must change for individuals with disabilities to take their rightful place in American society.

Conclusion

A new generation of teachers who fully comprehend the importance of transition in the special education curriculum and the adult services system is needed to empower young people with disabilities. This chapter proposes several basic tenets for professionals.

1. The student or family (i.e., the customer) is usually right. Listen to the student. Listen to the family. What are they saying? What hints are they giving in terms of what they need? These ideas are the critical features of a student-oriented transition program.

2. It is essential to look closely at what business and industry require of their work force. The new generation of teachers will examine their daily curricula and critically evaluate whether the skills, objectives, and activities they are currently emphasizing have direct relationships to what local employers need to maintain a dependable work force. These teachers will also determine whether their curricula are being influenced by what business says is required and needed or by objectives generated by bureaucrats who have no real-life experience.

3. All young people with disabilities should have the opportunity to be included in the workplace and schools. Special schools, segregated work activity centers, and programs that are designed only for people with disabilities must become institutions of the past. People with disabilities consistently perform better in typical work environments and natural community environments-perpetual segregation hinders transition. Integration must be an outcome, not a process, that educators, parents, and professionals.

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[1]These results were drawn from Louis Harris Associates [1998].

Discussion Paper

Topic: Cultural Empowerment of Students with Disabilities in Postsecondary Education

Discussion Questions:

1. What is the value and relevance of the concept of cultural capitol to the issues of disability?

2. What tools are available to measure an individual's level of cultural capitol?

3. How does a person increase their cultural capitol?

4. How does a teacher create a classroom that promotes cultural capitol?

Discussion Paper

Cultural Empowerment of Students with Disabilities in Postsecondary Education

JoAnn Yuen, Ed.D and Brian Shaughnessy, J.D

The Purpose of this Paper

The purpose of the paper is to provide a theoretical discussion about what students with disabilities need in order to persist in postsecondary education, and graduate with a degree. Many of the strategies developed for postsecondary students with disabilities originate in secondary education. These efforts are conceptualized as self-determination and self-advocacy strategies, and the general goals of these strategies are: teach students to understand and talk about their disability; enable them to identify needs and supports; and create self-advocates for supports and accommodations. In an attempt to increase the number of students with disabilities who attend colleges and universities and improve graduation rates, self-determination and self-advocacy strategies are now being adapted to postsecondary settings. The following discussion suggests a response strategy consisting of four components:

- self-determination and self-advocacy curriculum developed to build life skills and increase cultural capitol and provide the foundation and underlying philosophy guiding every course;
- environments sustained by faculty, where positive postsecondary experiences flourish,
- a range of related services exist for students on campus, and
- a coordinated system of supports that is classroom-centered.

Individually, these components appear to enhance a student's persistence in education and an institution's ability to retain students, together they reinforce efforts and commitments to students with disabilities. The first section contains a discussion of the status of students with disabilities in secondary and postsecondary education.

Specific Challenges within Secondary Education and Proposed Responses

General Outcomes and Status of Secondary Students

Secondary students with disabilities continue to lag behind their non-disabled counterparts in education and employment.

Employment and High School Graduation by Disability and Non-Disability

	With A Disability	Without A Disability
Full- and Part-time Employment	29%	79%
High School Completion	80%	90%
Attend Postsecondary Institution 1-2 years after high school	19%	56%
3-5 years after high school	27%	68%

(Stodden and Dowrick, 1999; Blackorby and Wagner, 1996)

Students with disabilities have poor postschool outcomes. An average of 22% of all students with disabilities drop out of school compared to only 12% of their peers without disabilities (Benz & Halpern, 1987).

An understanding of the persistence and retention of secondary students is presented in three clusters of variables: demographic information; secondary school preparation; and related services and supports.

Demographic information *(i.e., age, sex, ethnicity, disability status).* Edgar (1998) found dropout rates appear to vary according to disability classification. For students with learning disabilities or behavior disorders the dropout rate appears to be as high as 42%; for students with mild mental retardation, 18%; and for students in regular education, 16%. These figures increase significantly for students who are minorities and living in poverty. A number of studies show *economic* and *ethnic* status as factors in dropout (Balcazar, Keys, Garate-Serafini, 1995). Such studies support the special educators need for organized and proven information concerning factors that contribute to early school departure, as well as information on how to intervene before students are lost to the educational system.

Secondary School Preparation *(i.e., grade point average in both high school and college, high school advising, educational goals, career goals).* Studies indicate the primary influences on dropout rates are the same for youth with and without disabilities. These influences include: failure, poor grades; low self-esteem; poor attendance; repeating a grade(s); and dislike of school (Kortering & Braziel, 1998; Lichtenstein & Blackorby, 1995; Roderick, 1993; Cohen & deBertnecourt, 1991). Studies also suggest the negative consequences of dropping out of high school are as significant (if not more) for youth with disabilities as for youth without disabilities. Negative consequences include: unemployment; loss of opportunity for postsecondary schooling; and lack of engagement in productive activities after high school (Edgar, 1987; Padilla & Jay, 1990; Wagner, 1991; Kortering, Hess, & Braziel, 1996; Wehman, 1996). Of concern is students with and without disabilities do not appear to consult with school personnel prior to dropping out: "Given the intended nature of special education (lower teacher-to-student ratios, additional support, responsiveness to unique needs and individualization), the lack of support becomes especially troubling" (Kortering & Braziel, 1998, p. 72). The implication is the individualized education has apparently failed to allow students to be 'special' in their own eyes."

The National Longitudinal Transition Study (NLTS) (Blackorby & Wagner, 1996; Wagner & Blackorby, 1996) indicates that students with disabilities spend on average, 70 percent of their school day in general education classrooms. Unfortunately placement in general education appears to offer little post-school benefit to these students (Hocutt, 1996; Wagner & Blackorby, 1996). By most measures of academic and post-high school success, secondary school students with disabilities experience poorer outcomes than classmates without disabilities. In 1996, only 19% of high school graduates with disabilities—compared to 53% of youth in the general population—attended some type of postsecondary school two years after leaving high school (Blackorby & Wagner, 1996). The NLTS study confirms no service or support consistently aids high school students with disabilities in learning challenging academic content.\

No service or support may consistently aid in engaging students in academic content but data collected through the National Longitudinal Study (Wagner, 1991) suggests students who have completed occupationally oriented vocational courses have significantly lower absenteeism from school as well as a lower probability of dropping out. A project designed to develop a student's sense of competence and worth through meaningful vocational and academic experiences, shows encouraging results for dropout prevention by integrating social skills training and counseling support (Jambor, 1990).

Related Services and Supports *(i.e., governmental agency supports, extended family, peer).* One of the predominant themes across studies of prevention and reduction of dropouts is the need to shift from providing traditional predetermined curricula and services to identifying the unique needs and expectations of students and families (Grayson, Wermuth, Holub, & Anderson, 1997). This shift suggests the importance of looking at school-based reform efforts and determining how school-improvement strategies can be effectively *linked* to providing an educational environment that encourages students with disabilities to stay in school (OERI, 1995).

Specific Challenges within Secondary Education Classrooms and Responses

Attempts to close gaps between education and employment for students with and without disabilities is addressed in secondary education classrooms designed specifically for students with disabilities. In spite of these efforts, gaps and problems persist. The list of problems is presented below.

- Students with disabilities lack the variety, frequency and latitude of learning opportunities that allow them to experiment with behavioral options (Ward and Kohler, 1996, p. 288).
- There are failures to produce coordinated and integrated improvements that accommodate and support students with disabilities in learning rigorous, standards-based curriculum (Berliner & Biddle, 1996; Edgar, 1997; Hatch, 1998; USDOE, 1995, 1996; Waldron & McLeskey, 1998)
- Efforts to integrate students with varying abilities into core high school academic programs have been hindered by a shortage of financial and professional; resources, an inadequate research base; and a system of grouping individuals by ability that often subjects students with disabilities to dramatically different and unequal levels of curricula (Jorgensen, 1997; Oakes & Wells, 1998; Vaughn, Schumm, & Brick, 1998).

Increasing and Enhancing Learning Opportunities. In a further attempt to address poor post-school outcomes the Office of Special Education and Rehabilitative Services (OSERS, 1988) implemented a self-determination initiative to support individuals with disabilities. The initiative was unique because it was designed specifically for individuals with disabilities and included consumers in the decision making process (Ward and Kohler, 1996, p. 275). The goal of self-determination strategies is to enhance decision-making, personal choice, and self-advocacy skills; and increase the opportunity to enhance personal control. OSERS funded 26 model demonstration projects to support the needs of youth with disabilities. For this reason many successful self-determination strategies have their roots in secondary education. Demonstration projects are organized into four content areas: self-determination skills curriculum (i.e., skill content area and methods of instruction); mentoring and modeling; community-based experiential learning and generalizations across environments; and, futures planning and student involvement in planning (Ward and Kohler, 1996. p 278).

Early in its development self-determination was defined as an individual's ability to set and achieve goals (Ward, 1988). Wehmeyer (1992) broadened the definition to include constructs of autonomy, self-actualization and self-regulation. The lack of a common definition has not deterred the development of a variety of strategies to enhance a person's ability to self-determine. OSERS demonstration projects had the opportunity to incubate self-determination strategies within structured environments to support student populations with disabilities. The result is majority of self-determination and self-advocacy curricula are developed for secondary education students with disabilities and are conceptualized as self-contained courses with separate and distinct curricula [The Horizons Program (family-centered care philosophy), WorkAbility Program (college-prep), MAINROADS (mentoring), Take Charge Project (coaching, parent support, mentoring)].

Based on the assumptions and findings of model demonstration projects, self-determination strategies prepare students for adult life by implementing a variety of curricula aimed at enhancing decision-making, personal choice and self-advocacy skills; and increasing the opportunity to enhance personal control (Abery, Bruininks and Eggebeen, n.d.). Though some of these strategies may include students without disabilities the majority has been designed with specific goals in mind. The principles of self-determination may be shared but strategies to achieve success vary. Programs may target specific skills for development such as student transitions (Michaels, 1994), or how to pick a college, plan a career, and develop skills for daily life (Logan, 1995). Strategies may focus on environment and attempt to contextualize "self-determination within specific settings defined as residential life, work and leisure" (Schloss, Alper and Jayne, 1994, p. 215), or lessen inter- and intra-system barriers through collaboration (Irvine United School District, 1994). Others may attempt to design tools to assess and uniquely support students by creating "a composite of traits which may vary according to the person and the level of application" (Stowitschek, 1992, p. 3). No matter what the means, self-determination and self-

advocacy practitioners continue to create ways to improve the quality of their students' lives by enabling them to experience success in their lives and understanding what it means to have options. The goals of various self-determination projects are:

- Assume greater control in decisions that affect them, express preferences, make choices, communicate interests and desires, become active in creating vision for transition [Ward and Kohler (in press); Wehmeyer and Kelchner (n.d.)].
- Direct and manage one's own IEP (Martin, Marshall and Maxson, 1993);
- Learn skills and participate in the group action planning process (Logan, 1995);
- Set short- and long-term goals and take initiative to achieve goals (Ward and Kohler, 1996);
- Focus on transition (Michaels, 1994);
- Provide in-school and out-of-school experiences that lead to development of self-determination: (O'Neal and DeBoer, 1994);
- Guide educators with a basic understanding of the concept of self-determination, and present a wide variety of sample lessons and curricula. (Ben, Andersen and Wiedle, 1996);
- Include adults with disabilities, parents of children with disabilities, professionals working in the field in training. (Sands and Wehmeyer, (Ed.), 1996);
- Experience realistic situations calling for self-determination, and receive systematic instruction to ensure that they capitalized on these experiences. (Stowitschek, 1996).

These demonstration projects are well suited for a structured environment where students with disabilities are identified; programs and students have the similar schedules; the curriculum can be easily targeted to groups; school enrollment is open; and students are entitled to supports. While demonstration programs experience success—and students achieve goals and objectives within these classrooms— more research is needed to develop strategies to integrate self-determination efforts within unstructured, and natural, environments. Postsecondary self-determination strategies need to support a fluid environment where students are not easy to identify; schedules are unique; curricula vary between degree paths; college enrollments are likely to be merit-based and competitive; and student services are not entitlements.

Early demonstration projects created and tested self-determination strategies within defined settings to support students with disabilities. In some respects these models are what Rosaldo (1993) calls "safe houses"—classes designed for specific groups or specific outcomes. Rosaldo (1993) finds value in these "safe house of separateness" (p. xi) because he believes they "foster self-esteem and promote a sense of belonging in often alien institutions" (p. xi), which have proven to be critical to the retention of students. These demonstration projects create opportunities for students with disabilities and provide more latitude for experimental behavior. Self-determination and self-advocacy skills need to be continually instilled and reinforced to enable students with disabilities to continue to create successes in their lives.

Perhaps the need for "variety and frequency" of learning situations has driven efforts to produce self-determination and self-advocacy curriculum. Test, Karvonen, Wood, Browder, Algozzine (2000) identify over 60 self-determination curriculum and attempt to help people choose among the options. Test, et. al., (2000) also identify challenges to implementing self-determination strategies and list one source of "ineffectiveness of these curricula" in secondary education environments: curricula are not being translated into the classroom. Self–determination skills are not included in the IEP because teachers appear to be unaware that they existing (Test, et.al., 2000, p. 50). As practitioners the temptation may be to transplant existing self-determination strategies into other settings, i.e. employment, transition, adult education, postsecondary education. It may not be realistic to expect projects to take root and grow without first planning their integration into the larger system and educating participants. For self-determination curriculum and philosophy to effectively support students beyond secondary education they must be mainstreamed into a prime time system of support services and within classrooms on campus.

Specific Challenges within Postsecondary Education Classrooms and Responses

When someone with the authority of a teacher, say describes the world and you are not in it, there is a moment of psychic disequilibrium, as if you looked into a mirror and saw nothing.
—Adrienne Rich, Invisibility in Academe

General Outcomes and Status of Postsecondary Students

In spite of efforts at the secondary level students with disabilities are not represented on college campuses and those that do attend remain invisible:

- The rates for students with disabilities in postsecondary education, while improving, are still 50 percent lower than that of the general population (Stodden and Dowrick, 2000; OSEP, 1992).
- The strategies developed for secondary education students with disabilities may need to be modified to fit a postsecondary environment. Postsecondary students can become invisible within a large and fluid student body because they are not identified by an IEP, their schedules are unique, and they are associated with a major rather than the campus.
- Students with disabilities are allowed to remain invisible to a college campus because they are not reflected as a specific group in persistence and retention statistics across postsecondary institutions.
- Students with disabilities choose to remain invisible because they may be concerned about the "stigma of accommodations" and feel: "Teachers and other students think I'm getting away with something when I'm given accommodations (National Center for the Study of Postsecondary Educational Supports, 2000, p. 11).

The goal to increase the number of students with disabilities in postsecondary education is key because it appears, "better access to and outcomes in postsecondary education will improve not only the rates of employment for adults with disabilities but also the quality of employment" (Stodden and Dowrick, 1999, p. 19). The goal may not simply be to increase numbers of students but also increase their visibility on a campus. When students see themselves reflected in the image of a college campus they may begin to see themselves as part of a larger group of people who have similar challenges and goals. These challenges are not limited to students with disabilities. Challenges affect groups of students who are at-risk and likely to depart from postsecondary education prior to earning a degree.

The University of Hawaii provides persistence rates for major ethnic groups but statistics do not reflect the number of students with disabilities—students with disabilities remain invisible on their campuses.

Number of First-Time Students and Persistence Rates at UH-Manoa

	Fall 1993	Fall 1994	Persistence Rate
Hawaiian	185	136	73.5
Chinese	245	220	89.8
Filipino	237	210	88.6
Japanese	515	445	86.4
Others	357	282	79.0
Caucasian	309	213	68.9

Source: University of Hawaii, Institutional Research Office, 1996.

Looking into the future, the college student of the 21st century will more than likely be non-traditional. These students tend to delay college attendance and are older when they first enroll in a postsecondary education. Non-traditional students usually live at home, commute to school, may work part-time or full-time off-campus, and have family obligations (Bean and Metzner, 1985). It is the non-traditional student who also carries the additional burden of being "at-risk" (Roueche, Roueche and Milliron, 1995). The "at-risk" student is defined as a single parent, minority, first-generation college student, and attending school part-time. At-risk students face the challenge of earning a degree with the added responsibilities of working, having a history of academic difficulties, and being challenged by economic and child-care needs. What follows is a summary of the current understanding of the persistence and retention of postsecondary students who are non-traditional and may be at-risk. The summary is presented in six clusters of variables: demographic information, personal network; secondary school preparation; related services and supports; postsecondary institutional context; and locus of

control.

Demographic information *(i.e., age, sex, ethnicity, disability status).* The "at-risk" student is defined as a single parent, minority, first-generation college student, who attends school part-time. Minorities are underrepresented in postsecondary education and have poorer retention rates than Whites. Minorities are more likely than Whites to come from economically disadvantaged backgrounds (Tinto, 1993) and poor economic status is associated with lack of persistence and retention.

Personal Network *(i.e., family history, peer and social supports).* "If school has not been a cultural value in the lives of many students' families" it appears that "first-generation [college] students study less...and complete fewer hours during their first year. These [students] also tend to work more hours off campus" (Arnoid, 2000, p. 132). More family obligations also appear to challenge the persistence and retention of students.

For non-traditional students, a majority of normative supports appear to come from outside the campus. Non-traditional students may rely on peer supports outside the academic environment simply "because their reference group of peers, friends, family, and employers exists outside the institution" (Bean and Metzner, 1985, p. 506). For this reason, the classroom becomes the critical link between students and faculty, and academic and social interaction (Tinto, 1997). Faculty become essential links in college and are encouraged to engage students in the learning environment of the classroom and create opportunities for them to actively interact with other students. The assumption is increasing a student's involvement in academic activities will also foster social involvement within the larger college environment. With this in mind it becomes particularly important for students with disabilities to be supported within a classroom. The classroom is where academic learning may open doors to social integration, and integration is one key to retention and persistence.

Secondary School Preparation *(i.e., grade point average in both high school and college, high school advising, educational goals, career goals).* Minorities are more likely than Whites to have inferior pre-college schools, and enter college with more academic deficiencies (Tinto, 1993). Part of the challenge may be students who struggle in school do so simply because they have not been expected to succeed in school. Students may not have been impressed with expectations that they could learn, and it is unclear whether "students couldn't learn or just hadn't been taught" (Arnold, 2000, p. 132). Regardless, the problem creates a self-sustaining cycle of failure and "students who have not been taught because they are considered incapable of academic success carry psychological scars that block further learning" (Arnold, 2000, p. 133). In some cases students do not persist simply because they do not understand the time and effort that must be put into succeeding in school.

Related Services and Supports *(i.e., governmental agency supports, extended family, peer).* The extent to which effective and institutionalized supports are available at the postsecondary level varies widely from institution to institution (NCSPE National Survey of Support Provision, 2000). Generally, these services are not well-developed programmatically; and tend to lean toward advocacy, informational services, or remediation of content rather than accommodating areas necessary for independent learning and self reliance (Reis, Neu and McGuire, 1977; Stodden and Dowrick, 1999, p. 21). Support mechanisms exist on college campuses—with varying degrees of success—and programs may appear at-odds or uncoordinated because they compete among themselves for limited funds. Grants and funds may unknowingly create territories of service and stifle collaborative efforts on campus. At one postsecondary institution a program director was asked to collaborate on a grant but felt it was not appropriate to write grants for money previously accessed or currently used to fund another organization. These invisible cultural boundaries appear only after they have been trespassed upon and create additional barriers to seamless systems of services for people with disabilities.

Makuakane-Drechsel (1999) notes, "[The University of Hawaii (UH)] does not have special admission policies for any particular [ethnic] group, it has instituted student services programs to assist in the recruitment and retention of students" (p. 22). Support services appear in the form of programs designed for use outside the classroom and distinct from degree curricula.

Astin's (1993) research on student development identifies peer groups as having the most influence on a student's academic and personal development. Research supports the assumption that frequent peer contact and support is critical for student retention

(Spady, 1970, 1971; Tinto, 1975, 1993; and Pascarella and Terenzini, 1991). Tinto (1993) observes peer interaction is important for students who live in residential halls because the lack of adequate or meaningful interactions with peers often will lead these students to withdraw from the institution. Non-traditional students who are older and commuter students, may not be as influenced by their younger peers as much as they are by other adults, classmates, faculty and staff (Bean and Metzner, 1985; Tinto, 1993).

Postsecondary Institutional Context *(i.e., significant factors influencing success/failure of students with disabilities within postsecondary educational settings: level of education of parents and siblings, supports available/accessed).* "Students with disabilities have a continuing need for information and technical assistance in postsecondary education programs" (Pfeiffer and Finn, 1997). The failure to provide academic development services, supports, and programs for students with disabilities may cause them to achieve grade-point averages well below that of their nondisabled peers" (Stodden and Dowrick, 1999, p. 21).

Tinto (1975, 1987, 1993,1997) asserts academic and social integration and institutional commitment are important factors for student retention. Other researchers also believe students who are more involved or integrated in college life are more likely to graduate (Mallette & Cabrera, 1991; Nora, 1987, Pascarella & Terenzini, 1980, 1991). Pascarella and Terenzini (1991) emphasize academic achievement and related activities are far more important than social integration for traditional and non-traditional students [i.e., older students, commuters, and students working off-campus (Tinto 1993)] who commute to two- and four-year institutions. For commuter students, academic involvement is more critical to retention than social integration (Smith, 1993).

Astin (1975, 1977, 1993, 1997) argues the most important environmental factor affecting student retention is where the student lives while attending school. He finds students who live in residence halls have more time and opportunity to get involved in all aspects of campus life. Other researchers validate that living on campus has a positive, direct effect on students (Pascarella and Chapman, 1983; Pascarella and Terenzini, 1991). Living in the residence hall may not be option for the non-traditional student who lives at home, has a family (Bean and Metzner, 1985; Shield, 1994; Smith, 1993), holds a job, or has a disability.

Locus of Control *(Internal and External).* Halpern (1996) observes students who are gaining a perception of control and initially it appears to be little more than suspending disbelief (p. 4). He advocates for a curriculum that keeps students engaged in life's processes and believes they must begin to sense that they are actually gaining control over and participating in some important decisions in their lives. Strengthening an internal sense of control occurs over time reinforced by the ability to make perceptible differences in a life of one's choosing. Halpern (1996) believes students must experience success on many levels, and over time, to enhance their internal locus of control.

Graduates of postsecondary institutions believe students "need for internal motivation to successfully participate in postsecondary education" (The National Center for the Study of Postsecondary Educational Supports, 2000, finds p. 11). In light of this observation, students with disabilities may not belong in college until they are ready, both intellectually and emotionally. Teaching that merely puts energy "into trying to retain students instead of teaching them" may compound the problem (Arnold, 2000, p. 138) and will not be internalized as part of an individual's life force. It is important that interventions designed to support postsecondary students with disabilities "do not foster dependence" (Arnold, 2000, p. 136).

Students appear to enter postsecondary institutions poorly prepared and many need significant remedial work before they can take college-level courses (Seon and King, 1997).

Astin (1993, 1997) observes a positive correlation exists between studying, involvement in school activities, and interaction with faculty and peers. It also appears, students with disabilities take considerably longer to finish than nondisabled students (Stodden and Dowrick, 1999, p. 21). Students also leave postsecondary education for financial reasons (Arnold, 2000, p.135). Students may not have money for tuition and may find it necessary to work to attend school. Ironically, the need to work to attend college may relegate the need to attain a college degree.

Retention and Persistence of Postsecondary Students When researchers talk about retention and

persistence of college students they talk about a universities ability to retain students and their ability to succeed in postsecondary education. Alexander Astin and Vincent Tinto have received worldwide acclaim for their respective studies and theories on student retention and attrition. According to Braxton, Sullivan, and Johnson (1997), Tinto's Theory of Student Integration has received more critical attention than any other theory in its class and his conceptual framework has been cited more than 400 times. Tinto (1975, 1987, 1993) asserts that an individual's personal attributes (e.g. gender and ethnicity), family background (e.g. socio-economic status and parents' educational levels), and pre-college schooling (e.g. high school grade point average) affect the student's commitment to the institution as well as the goal of completing college. He believes individuals are responsible for their own decisions and feels personal experiences within the social and academic context of the institution affect the student's decision to leave. He argues an individual's departure from institutions should be viewed as a process of interactions between an individual with certain attributes, skills and dispositions (intentions and commitments), and other members of the academic and social systems of the institution. Positive postsecondary experiences reinforce intentions and commitments to the goal of college completion, and help the student feel integrated within the institution. Negative postsecondary experiences appear to distance the individual from the social and intellectual communities of the institution, and increase the likelihood that students will leave the institution and higher education altogether.

Tinto's research efforts are validated and most studies continue to focus on "traditional" students (Gillespie & Nobel, 1992; Krotseng, 1992; Mallette & Cabrera, 1991; Nora & Cabrera, 1993; Pascarella & Terenzini, 1980). Bean and Metzner (1985) point out Tinto's 1975 model does not take into account factors that affect non-traditional students who are older than 18 years of age and enrolled part-time, do not live on campus, and work full-time. More importantly, the focus of Tinto's work has turned to collaborative/ cooperative learning communities and how these restructured learning environments can promote student persistence (Astin, 1993; Tinto, 1997; Tinto, Goodsell-Love & Russo, 1993; Tinto, Russo & Kadel, 1994). "In effect these classrooms [collaborative and cooperative learning communities] serve[d] as the academic and social crossroads out of which 'seamless' educational activities are constructed" (Tinto, 1997, p. 613). Tinto's (1997) revised model links classrooms, learning, and persistence, and presents academic and social integration in a slightly different way than he has previously:

> *...Academic and social systems appear as two nested spheres, where the academic occurs within the broader social system that pervades the campus. Such a depiction would more accurately capture the ways in which social and academic life are interwoven and the ways in which social communities emerge out of academic activities that take place within the more limited academic sphere of the classroom, a sphere of activities that is necessarily also social in character. (Tinto, 1997, p. 619)*

Given what is known about the challenges faced by students with disabilities in postsecondary settings, the proposed response should include four components: self-determination and self-advocacy curriculum designed for postsecondary students with disabilities; faculty and cultural empowerment; a range of related services, and coordinated system of supports that is classroom centered.

Response 1— Self-determination and self-advocacy curriculum developed to build life skills and increase cultural capitol and provide the foundation and underlying philosophy guiding every course.

The concept of self-determination is not new and has been traced to the normalization movement of the 1970 (Test, et. al., 2000). The field of disability studies has embraced the concept and research continues to enhance the development of theory. The research base for self-determination supports the need for students to choose; monitor and control their learning; establish their performance standards; and assess, regulate and reinforce learning. Studies reveal:

Self-instruction training appears to be helpful for job-related, social skills and writing skills (Agran, Fodor-Davis, and Moore, 1986; Hughes, 1992; Hughes, Hugo and Blatt, 1996; Hughes, Harmer, Killian, and Niarhos, 1995; Graham and Harris, 1989).

- Students who determine their performance standards through self-evaluation and self-judgment demonstrated increase time on-task

when compared with students operating under imposed standards (Schunk, 1981; Brownell, Colletti, Ersner-Hershfield, Hershfield, and Wilson, 1977).

- Self-monitoring and self-instructional strategies have proven to be beneficial and appear to improve motivation and performance (Kapadia and Fantuzzo, 1988; Malone and Mastropiere, 1992; McCarl, Svobodny, and Beare,1991).
- Effective involvement has the potential for empowering students with disabilities to gain a perception of control and influence over their own learning and may contribute to a more powerful cumulative affect on their motivation for competent academic achievement and success in school (Van Reusen, Deschler, Schumaker, 1989).
- Self-determined people play an active role in creating their lives, assume responsibility for initiating action to achieve what they desire and respond to events in a manner that is consistent with their goals (Field and Hoffman, 1992).
- Independence and autonomy is related to the student's ability to choose for him- or her-self (Wehman, 1993), and direct his own learning (Agran, 1997).
- Adolescents who learn self-determination core skills, such as decision making, problem solving, and interpersonal negotiation, exhibit significantly higher levels of empowerment, psychosocial adjustment, and goal setting than do their peers who do not learn self-determination skills (Powers,Turner, Wilson, Matuskewski, Ellison and Rein, 1995).
- People with high levels of self-determination behave more autonomously are more assertive and effective social problem solvers, and exhibit higher levels of self-efficacy and self-esteem than do individuals with low levels of self-determination (Wehmeyer, Kelchner, Richards, in press).
- Self-regulated learning, self-reinforcement also appears to lead to increased performance (Frea and Hughes, 1997).
- Self-determined students were more likely to achieve more positive adult outcomes; including being employed at a higher rate and earning more per hour than their peers who are not self-determined. (Wehmeyer and Schwartz, 1997, Winter).

Self-advocacy and self-determination come from the belief system that values the right of individuals to make choices. Self-determination is defined as "acting as the primary causal agent in one's life and making choices and decisions regarding one's quality of life free from undue external influence or interference" (Wehmeyer, 1996, p. 24). Wehmeyer (1996) defines four essential characteristics based on the function (purpose) of behavior: the person acted autonomously; the behaviors are self-regulated; the person initiated and responded to event(s) in a psychologically empowered manner; and, the person acted in a self-realizing manner. Self-determination is conceptualized in a variety of ways:

- Attitudes which lead people to define goals for themselves and the ability to take the initiative to achieve those goals (Ward, 1988, p. 2).
- Acting as the primary causal agent in one's life and making choices and decisions regarding one's quality of life, free from external influence or interference (Wehmeyer, 1992, p. 305).
- Abilities to identify and achieve goals based on a foundation of knowing and valuing oneself (Field and Hoffman, 1994, p 164).
- Ability to consider options and make appropriate choices in the home, at school, at work, and legal base supports (Schloss, Alper and Jayne, 1994).
- Attitudes and abilities that facilitate an individual's identification and pursuit of goals...reflected in personal attitudes of empowerment, active participation in decision-making, and self-direction action to achieve personally valued goals (Powers, Sowers, Turner, Nesbitt, Knowles, Ellison, 1996, p. 292).

Self-efficacy and Worthiness. Powers, Singer and Sowers (1996) conceptualize self-determination as part of a multi-dimensional process involving the development of self-competence. Self-competence is complex, multidimensional and has been associated with a range of constructs: locus of control, self-efficacy, self-

regulation, autonomy, learned helplessness, mastery motivation, empowerment and quality of life (Powers, Singer and Sowers, 1996, p. 10). Powers, Singer and Sowers (1996) define self-competence as the relationship between efficacy—the capability to attain desired outcomes (Bandura 1986); and worthiness—self-evaluations of personal regard (Rosenberg, 1965). According to Branden (1969) it appears that efficacy and perceptions of worthiness cannot be isolated from one another; efficacy promotes self-worth and self-worth facilitates the push toward efficacy. The relationship between efficacy and worth appear to shape four distinct individuals (Powers, Singer, Sowers, 1996, p. 8):

- **High efficacy/low worthiness** The HE/LW person feels competent in areas not central to the judgement of personal worth. Others may perceive him/her as successful but the HE/LW person remains sensitive to personal inadequacies and may not derive pride from capabilities.
- **Low efficacy/low worthiness** The LE/LW person perceives himself/herself as ineffectual and of little use. The LE/LW may be at-risk for a marginal lifestyle.
- **Low efficacy/high worthiness** The LE/HW person tends to avoid or fails to value achievement and focuses primarily on her/his inherent value as a human being.
- **High efficacy/high worthiness** The HE/HW person generally perceives herself/himself to be effective in managing one's life and at the same time believes in her/his inherent value as a human being.

While perceptions of efficacy and worthiness provide a foundation for the development of self-competence, "self-competence is manifested in part, through self-esteem (personal worthiness), effective coping (responses to manage stressful situations), and self-determination (to decide and act on one's behalf)" (Powers, Singer, Sowers, 1996, p. 9). Although practitioners promote unique approaches to the challenge of enhancing self- determination skills they appear to be committed to a common assumption. Practitioners believe a student's ability to control his/her environment is empowering and can improve the quality of life [Abery, Bruininks, and Eggebeen, n.d.; Field and Hoffman, 1992; Halpern, 1996; Van Reusen, Deschler and Schumaker, 1989; Wehmeyer, 1994; Wehmeyer and Kelchner, (n.d.)].

Locus of Control. According to Wehmeyer (1994) perceptions of quality of life relate to the amount of control the person experiences across various domains. Individuals need to assume responsibility for initiating action to achieve what they desire and for responding to events in a manner that is consistent with their goals (Field and Hoffman, 1992). In order for people to be self-determined they must play an active role in creating their lives. Wehmeyer, Agran and Hughes (1996) argue people are self-determined based not on what they do, but based on the purpose or function of their action, i.e. take control over their lives, live the way they want (p. 59). It may also be important to qualify the argument: people must be understood in terms of the purpose and function of their actions *within the environment*. Individuals unemployed and employed in sheltered settings perceived themselves as having less control than individuals employed competitively (Wehmeyer, 1994). These results indicate the need to include choice and control in programming for students with cognitive and developmental disabilities. The results also suggest the need to provide unsheltered settings so students with disabilities experience success in competitive, natural environments.

The issue of control is important to the concept of self-determination and the challenge becomes how to identify and build skills to enhance a person's sense of control. The nature of control and its implications may be important in understanding postsecondary students, in particular its relationship between, control, graduation rates, employability and perceived quality of life. Hawaii consumers and practitioners express concern that self-determination and self-advocacy teachers will simply pour a curriculum into students and expect instant results. The challenge for students with disabilities is they may have fewer opportunities to interact with others and have much less latitude for experimental behavior (Ward and Kohler, 1996, p. 288). Increasing learning opportunities may serve to reinforce the concept of self-determination and self-advocacy and enable students to continue to create successes in their lives. One response is to integrate self-determination and self-advocacy strategies within several environments and engage different departments and many classrooms. The challenge is to design a curriculum that fits existing courses and established curricula with the

tools and teaching strategies necessary to enhance a student's self-determination and self-advocacy skills—skills useful for postsecondary students with and without disabilities.

The Curriculum and Cultural Capital. For curriculum to truly engage and empower students, change must occur within the classroom and on the campus and effect institutional norms, curricula and pedagogies (Rosaldo, 1993, p. xi.). Rosaldo (1993) asserts, "The general goal is to achieve diversity in all rooms, decision-making rooms, classrooms, faculty rooms, rooms of all kinds, shapes and sizes. In order to democratize higher education people need to work together to change the present situation where the higher the perceived social status of the room the less diverse its membership (pp. xi-xii). Rosaldo (1993) advocates for the use of "safe-houses" of education to separate students from the main population and "the prime time mainstreaming" (p. xi) of ideas. He believes safe-houses "foster self-esteem and promote a sense of belonging in often alien institutions and have proven critical the retention of students" (p. xi). A majority of OSERS demonstration projects have created curricula to promote "safe-houses" for students with disabilities. The next step is to open the doors of self-determination classrooms and transition strategies to other settings: mainstream ideas and strategies to communicate perspectives within prime time. "How otherwise can diverse groups articulate their intellectual visions to greatest effect? (Rosaldo, 1993, p. xi.)."

The theory of cultural capital developed by Pierre Bourdieu appears relevant to the culture of students with disabilities. Cultural capitol has been applied to education systems; it is comparable to economic capital which can be transmitted by inheritance and invested in order to be cultivated; it has a political function; and relates to specific groups that have certain characteristics which make them fit or unfit for success (Apple and Wexler, 1978). Bourdieu assumes academic culture provides a reproduction function in society and believes the inequities of cultural capital do not lie in the cultural attributes of children, but in the limited responsiveness of our economic and educational institutions (Apple and Wexler, 1978, p. 38). Cultural capitalists believe certain forms of knowledge are elevated above others and assert individuals and families most connected to mainstream social institutions, those possessing cultural capital, have a greater opportunity to assert their linguistic and cultural competencies and shape the norm. Researchers suggest educational institutions value and maintain the knowledge and "culture" of the dominant group typically defined as middle-class whites. All other groups, lower class, minority, first-generation college students, and students belonging to the disability culture, may lack the "cultural capital" of the dominant group.

Bourdieu's theory provides the basis for a small body of research that examines the relationship between cultural capital and education. Studies examine the accumulation of cultural capitol and its effect on literacy, parent involvement, access to technology, and postsecondary education.

- Prep school graduates appear to accumulate more social capital and public school graduates accumulate more cultural capital (Zweigenhalf, 1992).
- Positive relationships exist between literacy competence (Lareau, 1987), grades (DiMaggio, 1982; Rinne and Kivinen, 1993) and capital culture.
- Schools have a standardized view of the proper role of parents in schooling and this view is shaped by parents who participate more often—middle-class parents (Lareau, 1987).
- The perception that the middle class has greater influence in determining the value of cultural capital is strengthened by the findings that middle-income parents appear to participate at higher rates than lower-income parents in the education process (Smrekar, 1992).
- Students without access to information technology may be further disadvantaged and lack of access will serve as another barrier to the acquisition of cultural capital (Frow and Emmison, 1998; Boyles, 1997).

Cultural capital has also been applied to postsecondary settings. Valadez (1996) asserts that social position and class culture are a form of cultural capital in higher education. He further states the community college is not organized to take advantage of working-class students' skills and knowledge but operates instead to benefit the middle-class. Rinne and Kivinen (1993) have found similar evidence that suggests participation in postsecondary education

appears to be influenced by social status, cultural capital and other factors. It has also been determined that capital culture has significant and positive effects on educational attainment, college attendance, college completion, graduate attendance and marital selection for men and women (DiMaggio and Mohr, 1985).

Makuakane-Drechsel (1999) asserts "by ignoring non-dominant culture and knowledge, faculty [across departments] will only continue to promulgate students' low sense of worth and academic ability" (p. 51). The effect may be to erode a student's sense of control over the environment. An academic environment that promotes the "cultural capital" of each student should acknowledge what students bring with them into the classroom, and encourage them to learn what they still need to know in order to succeed academically. Individuals with disabilities must be able to shape the norms of the culture so their image is reflected in society. Students able to see their reflection in the norm of a college campus may experience a moment of psychic *equilibrium.* Multiplying this reflection by increasing learning opportunities may strengthen the student's sense of involvement in and control over the environment and ultimately reinforce one's ability to succeed. Self-determination is the opportunity that not only increases cultural capital but it also increases human capital.

Researchers have attempted to quantify and qualify the effects of cultural capital but few studies suggest ways to increase cultural capital. Shaffer (1998) advocates for the use of academic advisors [human connections to the institution] to help students maximize their human capital and Katsillis and Rubinson (1990) believe cultural capital should be viewed as multicultural competence and should be included as part of formal education. Though the theory has its advocates there are no studies that relate cultural capital to individuals with disabilities, and no studies to outline how to include cultural capital within existing classroom curricula. We propose a study that will promote cultural capital in postsecondary education. The success of students with disabilities within a general education curriculum is dependent on having a curriculum in place within the context of a school-wide philosophy that values the achievement and participation of all students (Coalition of Essential Schools, 1998; Jorgensen, Fisher, Sax, and Skoglund, 1997). In addition, when the governance structure of a school is inclusive and reflects *all* personnel, and *all* personnel are responsible for the learning of *all* students in the school, expectations and learning opportunities for all students are improved.

Response 1—Recommendations

Develop a curriculum designed to fit existing courses and established curricula with the tools and teaching strategies necessary to enhance a student's self-determination and self-advocacy skills.

- In every setting the consumer with disabilities must be understood not only in terms of the skills they bring into the postsecondary environment but also the purpose and function of their actions within the postsecondary environment.
- On a college campus it is not enough to create unique programs that serve as "safe houses" for students with disabilities. Self-determination and self-advocacy strategies need to become mainstreamed and communicate perspectives in prime time campus venues.
- Students with disabilities have fewer opportunities and are given much less latitude for experimental behavior than students without disabilities. As students transition out of secondary education is important to continue to increase the range and frequency of learning opportunities to reinforce the concept of self-determination and self-advocacy and enable students to continue to create successes in their lives.
- Include choice and control in programming for students with cognitive and developmental disabilities. Provide unsheltered settings so students with disabilities can experience success in competitive and natural environments.

Response 2— Faculty create environments where positive postsecondary experiences flourish

Research finds frequent student-faculty interactions appear to have positive effects on student retention (Feldman and Newcomb, 1973; Spady, 1971; Tinto, 1975, 1993; Astin, 1977, 1993; Pascarella and Terenzini, 1991). Tinto (1993) believes faculty provide a primary role in shaping and communicating the educational values and standards of the institution. "Issues of intellectual work, commitment to student intellectual growth, and opportunities for student involvement in learning, especially in the classroom, are all deeply affected by the way the faculty interacts

with students over matters of intellectual substance" (Tinto, 1993, p. 53).

Tinto (1993, 1997) and Tinto, Goodsell-Love & Russo (1993) view the faculty's role as being most influential in the classroom and believe if faculty can motivate students to be more involved in the classroom, involvement will continue outside of the classroom. Pascarella and Terenzini (1977, 1979) find informal contacts between students and faculty that focus on academic matters, have positive effects on student retention. Pascarella and Terenzini (1980) also show the quality and impact of informal student-faculty contact is as important as the frequency of interactions. If a student's interaction with a faculty member is meaningful and results in good "academic performance and intellectual gains" (Terenzini & Pascarella, 1980a, p. 527), other contacts with that faculty member will likely be positive. Graduates who have disabilities comment, "postsecondary faculty are often unaware of disability issues and are not well educated about the needs and rights of students with disabilities" (National Center for the Study of Postsecondary Educational Supports, 2000, p. 3).

Given the importance of faculty it should be noted, "teaching poorly prepared students is considered [by institutions] a low level enterprise, often left to part-time faculty members hired specifically for this purpose" (Astin, 1985, p. 104). There are concerns that the education of at-risk students is in the hands of teachers who lack support, training and integration within the institution. There are also concerns for teachers stressed by a classroom of at-risk students. They may fail to establish long-term mentoring relationships with students who need the support, find less professional satisfaction, and leave the ranks of part-time faculty.

Because of the importance of faculty-student interaction, Tinto (1988, 1993) recommends that faculty reach out to students during the first six weeks of the first semester and communicate to students that they are valued. A strategy practiced by some colleges is to assign mentors—administrators, faculty and staff—to each student. Students who feel valued by their institution may have a stronger commitment to the institution and graduation than individuals who do not feel valued. Rendon (1994) agrees with Tinto and argues that non-traditional students, in particular, need someone to reach out to engage them:

> • Nontraditional students do not perceive involvement as *them* taking the initiative. They perceive it when someone takes an active role in assisting them. The role of the institution in fostering validation is active—it involves faculty, counselors, coaches, and administrators actively reaching out to students or designing activities that promote active learning and interpersonal growth among students, faculty, and staff. (p. 44)

For non-traditional and commuter students, the classroom may be the only place where students will have contact with faculty. These students usually spend little time outside of classes on campus. They may not have the time or opportunity to seek out help when they are having academic difficulties or problems adjusting to the social climate. For these students to get involved in the college and university community, involvement would have to begin and be sustained in the classroom. Faculty are identified as the primary agents to build student involvement.

Researchers focus on collaborative/cooperative learning communities and how these restructured learning environments promote student persistence. (Austin, 1993; Tinto, 1997; Tinto, Goodsell-Love & Russo, 1993; Tinto, Russo & Kadel, 1994). Tinto (1997) suggests designing classrooms to link to learning and persistence. Astin (1993) adds that collaborative learning environments not only encourage students to become more actively involved with other students but it also gets them more involved in the learning process.

> "In effect these classrooms can serve[d] as the academic and social crossroads out of which 'seamless' educational activities are constructed. Social and academic life are interwoven and the ways in which social communities emerge out of academic activities that take place within the more limited academic sphere of the classroom, a sphere of activities that is necessarily also social in character" (Tinto, 1997, p. 613).

Response 2—Recommendations

Faculty [across departments] are the primary agents to build student involvement. Faculty can strengthen student's sense of worth and academic ability, and strengthen a student's sense of control over

his/her environment.

- For non-traditional students, the classroom may be the only place where they will have contact with faculty. These students usually have limited time to spend on the college campus or to get involved in out-of-class functions. They may not have the time or opportunity to seek out help when they are having academic difficulties or problems adjusting to the social climate. In order these students are to get involved in the college and university community, the involvement may have to begin and be sustained in the classroom.

- Faculty need to reach out to students during the first six weeks of the first semester and communicate that students are valued. Students who feel valued by their institution may have a stronger commitment to the institution and graduation than individuals who do not feel valued. Non-traditional students, in particular, need someone to take the initiative and reach out to engage them.

- Frequent student-faculty interactions appear to have positive effects on student retention. Faculty have the primary role in shaping and communicating the educational values and standards of the institution.

- Student's involvement in academic activities may also foster social involvement within the larger college environment. If this assumption is true a college should be compelled to support students with disabilities within their classrooms. The classroom becomes the common ground for all students, academic learning may open doors to social integration and integration is one key to retention and graduation.

Response 3—Provide a range of related services exist for students on campus

There is a new "paradigm of disability" one that maintains "disability is the project of an interaction between the characteristics of the individual and the characteristics of the natural, built, cultural, and social environments" (Seelman, 2000, p. 1). Mertens (2000) observes, "The new paradigm frames disability from the perspective of a socio-cultural minority group such that disability is defined as a dimension of human difference, and not a defect (as it is viewed in the medical model). The meaning of disability is derived from its social context and how society responds" (p. 99). The human services system is also in the midst of a paradigm shift and fulcrum of the shift appears to be individual autonomy (Beauchamp and Childress, 1989) which is grounded in the civil rights movement aimed at the rights of citizens and social inclusion (NIDRR, 2000, p. 1)

Perhaps in response to this paradigm shift there is a 90 percent increase in the number of postsecondary programs offering opportunities for adults with disabilities to continue their education (Pierangelo and Crane, 1997). The number of postsecondary students reporting a disability is also increasing: in 1978 there were less than 3 percent; 1994, 9 percent; and in 1996, 19 percent. Research suggests supports and services found in secondary and postsecondary education—many of which are entitlements—are extensively developed and in some states these programs even work. The extent to which effective and institutionalized supports are available at the postsecondary level vary widely from institution to institution (NCSPE National Survey of Support Provision, 2000). These programs may be poorly developed and lean toward advocacy and informational services, or remedial support. Limited funding sources may create a competitive environment where programs appear at-odds or uncoordinated.

In other programs providers may be understaffed and only able to assist students with the most urgent needs. Limited staffing not only limits the service options providers have at their disposal, it also limits the partnerships students have with the university. Postsecondary students who have supports available feel, "disability support providers often give students a human connection to the services offered by the school" (National Center for the Study of Postsecondary Educational Supports, 2000, p. 10). In a focus group study conducted by the National Center for the Study of Postsecondary Educational Supports (2000) students said they "long for a "partnership" between disability services on campus, university administration, and the students themselves" (p. 3). Students feel providers should offer "more outreach and information" (National Center for the Study of Postsecondary Educational Supports, 2000, p. 10). In order to feel supported some student believe service providers should focus on individual needs (National Center for the Study of Postsecondary Educational Supports, 2000, p.11). In light of this understanding systems of support must reach out and engage students

and maintain a student-centered focus. The best place to engage students is at the crossroads of academic and social life, in the classroom (Tinto, 1997, p. 613).

Response 3—Recommendations

Establish a human connection to a range of services and supports available on campus for students with disabilities.

- Non-traditional students appear to expect institutions to take the initiative in assisting them. In order to support postsecondary students, institutions need a range of supports—reinforced through services, curricula, pedagogy—designed to reach out to, engage and teach students with disabilities.
- Unlike secondary students who are identified as having a disability, postsecondary students can remain invisible on a campus. It is necessary to have a range of service options available to serve a student population that is hard to reach.
- Programs should promote a student-centered approach to ensure students do not feel they are micro-managed by the system.

Response 4—Create a coordinated system of supports that is classroom-centered

Research suggests simply having supports available to students may not be enough. Secondary education has prepared students with disabilities to take "responsibility for initiating, designing and ensuring their own education accommodations" (Stodden and Dowrick, 1999, p. 21). Ironically, "non-traditional" students may still expect institutions to take the initiative in assisting them (Rendon, 1994). It is unclear how much institution "initiative" is perceived to be enough. Students want to determine their own needs and there appears to be a fine line between feeling supported and being "micromanaged" by programs. According to Cummings (1993) the self-determination movement is about power and the questions become: Who has control and power and who should? Who controls the nature and direction of my life? Will it be professionals and paid staff, or will it be my family, my friends, and me? (Conroy, Crowley and Cummings, 1998).

Response 4—Recommendations

Create a seamless, coordinated system of services delivered within the classroom. The system should be inclusive and reflect all personnel, and all personnel should be responsible for the learning of all students on the campus.

- Promote a philosophy that celebrates the disability culture and knowledge and is classroom-centered.
- Non-traditional students appear to expect institutions to take the initiative in assisting them. In order to support postsecondary students, institutions need a system of supports—reinforced through services, curricula, pedagogy—designed to reach out to, engage and teach students with disabilities.
- Service support mechanisms exist on college campuses and programs may appear at-odds or uncoordinated because they compete among themselves for limited funds. Since the provision of postsecondary supports is not an entitlement as it is in secondary school, it is critical for students to have a range of supports at their disposal—supports that appear seamless and reinforce each others efforts.
- The University of Hawaii (UH) does not have special admission policies to assist in the recruitment and retention of students and support services for students with disabilities appear in the form of programs operating independently from classrooms. The retention and persistence of students with disabilities must be promoted from within classrooms.
- The UH provides persistence rates for the major ethnic groups at UH-Manoa but statistics do not reflect the number of students with disabilities. More campus-wide information is needed to better identify, understand and support students with disabilities.

Current Proposal: Projected Outcomes and How It Will Be Measured

To support postsecondary students with disabilities three areas need to be developed: a self-determination curriculum, taught by faculty who engage and value diverse cultures and abilities, delivered within a

seamless system of services that originates within the classroom. The preliminary steps toward this end will be an intervention study. The proposed intervention study will provide a self-determination curriculum for students attending the University of Hawaii, Manoa, and research opportunities for the Center on Disability Studies/UAP. From what is learned a self-determination curriculum, and teaching tools and strategies will be developed for postsecondary education that can be adapted to a variety of disciplines and classrooms. The intervention will be designed as a credit course for students transitioning from high schools and community colleges. A quantitative and qualitative study will be used determine the academic, social and professional needs of postsecondary students. The study will also be used to identify, develop and implement effective practices to assure students with disabilities have the knowledge and skills necessary to advocate for their own successes in education and employment.

According to Seelman (2000) the United States is building onto a "successful research legacy that encompasses rehabilitation science and disability studies" (p. 1). Seelman defines effective research for the 21st Century as having three focuses 1) the dynamic interplay between the person and environment; the development and evaluation of environmental options in the built environment and the communications environment; and a public policy context (Seelman, 2000, p. 5). The proposed study focuses on the dynamic interplay between the individual with disabilities and the environment, and the implications for public policy. For this reason, the research questions are:

Research Questions

What skills do students with disabilities need to possess to successfully advocate for their own educational supports and subsequent workforce settings?

What skills do students with disabilities need to possess to develop internal locus of control and increase cultural capital in postsecondary settings?

What is the impact of a locus of control/cultural capital intervention during postsecondary education upon the development of individual empowerment and self- advocacy skills in students with disabilities?

How do internal and external "locus of controls" relate to the outcomes of postsecondary students who have disabilities?

How does capital culture relate to the outcomes of postsecondary students who have disabilities?

Overview of Phases and Timelines

January 2001 to August 2003

Quantitative and Qualitative Instruments

January 1, 2001 to May 31, 2001

- Develop Curriculum—January 1, 2001 to May 31, 2001 [Pilot Course Summer 2001/Course Offered Fall 2001]
- Data Analysis and Write-up—August 2001 to May 2002
- Products and Reports—January 1, 2001 to End of Project

Quantitative and Qualitative Instruments

January 1, 2001 to May 31, 2001[Pre-test: August 2001; Post-Test 1: October 2001; Post-Test 2: November 2001; Post-Test 3: December 2001]

Quantitative Instruments The first quantitative instrument, a "self-awareness instrument," will be developed and administered prior to the determination of groupings. The instrument will provide an inventory of characteristics for students with disabilities entering postsecondary education and will enable researchers to identify the range of variables that influence the retention of postsecondary students who have disabilities. The self-awareness instrument will assess:

- Adjustment and Challenges
- Close Friends
- Decision Control
- Individual Planning and Support (Element of the Planning Process)

- Integrative Activities
- Knowledge and skills needed to successful navigate postsecondary education and employment settings
- Orientation toward Productive Activities
- Perceptions about postsecondary education
- Personal Life Quality
- Quality of Life Changes
- Quality of Work
- Self-awareness and self-esteem
- Self-determination and self-advocacy
- Self-determination evaluation
- Transition skills and the ability to move between social settings and adapt to change.

The second quantitative instrument, an "internal locus of control assessment," will be developed and administered at the beginning and end of each intervention module (four administrations). The instrument will measure the effects of the intervention on self-awareness, self, esteem, self-determination, self-advocacy, and personal development among participating students. The instrument will measure pre- post-interval changes in four areas: attitudes, knowledge and understanding, and actions concerning one's own abilities and disabilities; self-awareness and self-esteem; knowledge of educational supports as they relate to accommodation needs; and ability to develop a range of skills and plan strategies to advocate for supports in postsecondary education and subsequent workforce settings

Qualitative Instruments The qualitative method will also be used to understand the effect of the intervention by listening to the voices of students with disabilities. Case studies will be used in conjunction with life course charting. Life course charting will consist of autobiographical life narrative writings that describe student experiences, supports, challenges and successes in life and school settings. This process of self-assessment will provide insights into a student's perception of the past, present and future; and the factors shaping expectations and creating successes.

A qualitative inquiry will be used because it is process oriented. Qualitative approaches enable researchers to look at "settings and people holistically; people, settings, or groups are not reduced to variables, but are viewed as a whole" (Taylor and Bogdan, 1984, p. 6). LeCompte and Goetz (1982) observe, "ethnographers [qualitative researchers] hope to find a theory that explains their data" (p. 34). The overarching concern for hearing—not merely listening to—and retelling stories from each participants point of view; punctuate the human-centered nature of qualitative methods. Qualitative researchers try to understand people from their own frame of reference and understand the "meaning for participants in the study, of events, situations, and actions they are involved with" (Maxwell, 1996, p. 17). Qualitative researchers "experience reality as others experience it," and value all perspectives (Taylor and Bogdan, 1984, p. 6). Within this method people's words and acts are not reduced to statistical equations. When qualitative inquiry is used effectively, "we get to know them [people] personally and experience what they experience in their daily struggles in society" (Taylor and Bogdan, 1984, p. 7). Qualitative research allows us to understand individuals, "through numbers we do not come to know individuals we come to understand groups" (Office of Hawaii an Affairs, 1994, p. iv).

The ability to generalize the impact of self-determination efforts must be understood in relation to how these strategies are adapted and integrated within specific settings and how they effect students at all levels. While the quantitative approach provides a between-group perspective, a qualitative perspective can provide additional, and necessary, insights into the dynamics within groups and settings.

Lather (1986), and Tierney (1995) also suggest the value of qualitative research is only as good as its ability to impact the lives of those studied. We are using a curriculum as the intervention and will study its impact on students but we also hope our efforts in the classroom will enrich the lives of students and create effective self-advocates. Research then becomes another vehicle to increase cultural capitol.

Develop Curriculum

January 1, 2001 to May 31, 2001

The proposed curriculum for the intervention modules is presented in Appendix 1.

Pilot Course—Summer 2001 [Pilot Course Planned as 2-week Summer Camp for incoming freshmen]

A purpose of conducting pilot activities is to field test various aspects of the intervention and refine the measurement instruments based upon feedback from participating students and a panel of experts. The pilot will involve the selection of the sample of 10 to 15 incoming freshmen, reflecting the demographic diversity of the University of Hawaii campus. The pilot method will consist of a focus group process of participation and structured feedback for each of the instruments and each module of the intervention. Research staff and a panel of consumers and experts (PAR team) associated with the research project will review all feedback. Instrumentation will be revised and intervention components will be finalized for the next phase of the study.

Self-determination/Self-advocacy Course Offered

Fall 2001

Applying what was learned from the Pilot Study the self-determination curriculum will be fine-tuned and defined as the research intervention. The research intervention will consist of three instructional modules. Each module is scheduled for a five-week period of time (or fifteen contact hours). After each module is completed, an assessment will be conducted to measure change in student's attitude, knowledge, and skills concerning self-determination, as well as other assumptions relating to their educational goals and life satisfaction. The intervention course will be scheduled to meet one time a week for a three-hour period. A "seminar" style of class structure will allow for in-depth discussion, and will provide students with a full week to reflect on their planned contributions at the next class meeting. Further, the schedule will diminish time involved in transportation for students (major barrier to participation). To the greatest extent possible those delivering the intervention will apply the principles of Universal Design to the course, making it possible to include students with a wide variety of disabilities.

Recruitment of Students. Students with disabilities will be recruited from the freshman and sophomore class at the University of Hawaii. Researchers will work with high schools, private agencies and UH campus supports to access students with disabilities. This study will include students who have disabilities and will require students to complete a self- study questionnaire in order to provide a range of demographic and background information, within the following categories:

- demographic information (age, sex, ethnicity, disability status);
- personal network (family and peer supports, natural support figures, mentors, coaches);
- secondary school preparation (grade point average in both high school and college, high school advising, educational goals, career goals);
- related services and supports (governmental agency supports, extended family, peer);
- postsecondary institutional context (significant factors influencing success/failure of students with disabilities within postsecondary educational settings: level of education of parents and siblings, supports available/accessed); and,
- locus of control (internal and external)

Data Analysis and Write-up

August 2001 to May 2002

The data generated from each of the self-studies will be analyzed and students will be clustered in two groups of 10 or more, according to (1) those displaying internal locus of control and (2) those displaying external locus of control. A third group, consisting of students with a combination of the above two profiles will form a control group and will not participate in the intervention experience.

During this period data will be coded and analyzed for the purpose of:

- Answering the research questions initially proposed.
- Identifying key factors of support prior to entry into post secondary education.
- Identifying key factors of support during participation in post secondary education.
- Measuring changes in knowledge, attitude, self-advocacy skill and behavior after each of the three interventions.

- Tracking the overall changes prior to and after participation in the intervention.
- Evaluating whether the any or all of the interventions had a positive effect on the student's ability to participate in postsecondary education.
- Gathering substantive qualitative data on the concerns, needs, strengths and effective supports the of student participants.
- Identifying the seminal events in the student's life that they believe effected their Life Course directly.
- Determining whether the students found the course to be valuable and positive.
- To establish a baseline of knowledge of the students pre and post intervention status so that tracking of the students future Life Course can be correlated.
- Verifying the effects of the intervention on Groups A and B by comparing the results of the pre and post assessments with the Control Group C.
- Identifying possible participants in a continuing longitudinal study.

Products and Reports

January 1, 2001 to End of Project

Self-assessment Inventory for Students who have disabilities

- The Life Course Chart from Module 1
- The Life Course Chart from Module 2
- The Life Course Chart form Module 3

Papers submitted for publication in appropriate academic journals related to postsecondary educational supports for students with disabilities.

Participation in conferences (PAC RIM, AHEAD)

An comprehensive instructor's handbook, complete with curriculum to be made available, at request, by educator's in postsecondary settings that wish to offer the course on their own campuses nationwide. A website and CD-ROM containing course materials will be available to facilitate dissemination to both instructors and students.

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Appendix 1. Curriculum

Module One: Five Weeks (15 class Hours)
"How I Got Here"
Life Course Awareness through Autobiographical Narrative

This module will utilize PAR and CFL methodologies to actively involve the students in both the education and research processes. The focus will be on Consumer Focused Learning through the use of shared life narratives leading up to the present. Under the facilitative direction of the instructor, students will write their own life narrative story, focussing on key events and life changing moments leading up to their entrance into post- secondary education. Particular emphasis will be placed on experiences at the secondary school level. The students will be encouraged to write about key events or transitions in their lives, the meaning they ascribe to those moments, how they reacted in those moments and the way in which their life was impacted. In order to facilitate their ability to identify these moments, students will fill out a "Life-Course Chart" that plots and measures their degree of life satisfaction on a yearly basis (four quarters per year) leading up to the present. Their self-created charts will be shared with other class members. This will serve as a means of preparing the student to write their life narrative focusing on their perceived significant moments. Particular emphasis will be placed on experiences in educational settings, especially secondary school. The completion of the life narrative—birth to postsecondary education—will be the primary activity Module One.

Projected outcomes for students with disabilities in Module 1:

A consumer focused "life narrative" will enable students to:

1. Place oneself at the center of their own life course with empowerment skills to view themselves as the "director" of their life.
2. Attain a heightened awareness of themselves as people with both strengths and weaknesses.
3. Gain a new clarity of the significant and meaningful events in their own life journey up to the present point.
4. Articulate key moments of change in their life that impacted them significantly either positively or negatively.
5. Identify key role models, authority figures, supporters and non-supporters in their lives.
6. Become more aware positive roles they have played in the social and educational world and in the lives of others.
7. Relate past experience to their present goals and expectations.
8. Develop critical and analytical skills.
9. Provide supportive feedback to other persons with disabilities.
10. Improve writing ability and capacity for oral communication.

Instructor outcomes of this consumer focused "life narrative" module will enable researchers to:

- Identify recurring issues related to effective support provision.

- Gather qualitative data on all of the above topics.
- Gain insights into the factors contributing to and impeding success in educational environments.
- Compare the life course charts of students to identify key factors in life satisfaction.
- Build a foundation of trust with the students crucial to the success of modules, two and three which depend on high rates of disclosure regarding present challenges and aspirations for the future.

Module 2: Five Weeks (15 class Hours)
"Here and Now"
Self-determination in Practice

This module will also utilize PAR and CFL methodologies to actively involve the students in both educational and research processes. This module will consist of two elements that facilitate a productive and relevant reciprocal dynamic of empowerment.

Self-Advocacy in Practice: Skills for Here and Now. The students will ask about and receive information regarding existing support services, sources of information, assistive technology, their civil rights under the law, principles of career guidance, the role of self-advocacy in realizing self-determination and any other information deemed crucial to an effective knowledge base for authentic self- determination. Training in advocacy skills and self-determination will be offered, as well as an awareness of educational supports that might benefit their postsecondary school endeavors. Guest speakers, representatives from student services, faculty, counselors, graduates with disabilities, and other persons deemed to have valuable information and counsel relating to success in the post secondary school environment will be invited to attend.

Keeping Track: Daily Life Narrative and Life Course Charting. The student will apply the "life narrative skills" and "life course awareness" they developed in Module One in the following ways:

Students will plot their daily experience on a Life Course Chart that requires them to assign a value to the level of life satisfaction they experienced on each day for the next five weeks, including weekends (focus upon educational and related support provision and accommodation). This will culminate in a Life Course Chart that will offer a graphic representation of the student's experience over the remaining ten weeks of the course.

Students will record daily journal entries. They will be asked to describe the range of successes and failures experienced on a daily level that impacts their capacity to participate in postsecondary education. For example: obstacles encountered, frustrations, needs identified, gaps in knowledge, supports and supportive people, self-advocacy efforts; actions taken to further personal goals; school experiences; and personal experiences (family life, social life and community life).

Each three-hour class will involve a combination of these elements. Students will share their Life Course Charts, discuss them with their classmates, answer questions and read aloud sections of their journals they deem appropriate and relevant. This will serve as a catalyst for class discussion of key issues in support and the challenges students with disabilities face on a daily basis.

When it is relevant and acceptable to students, people working in areas related to student support services may be present in class and/or share in the results of discussions. Outside participation may take two forms: listening; and sharing information about resources, referrals, supports, services, legal issues, bureaucratic processes, and sources of data relevant to the students needs and academic goals.

Module Three: Five weeks (15 class hours)
Envisioning the Future
Creative Life Course Design

Building on the self-awareness, self-advocacy skills and knowledge gained in Modules One and Two, Module Three will turn its attention to issues surrounding the students' aspirations, supports and "life work." Module Three will not follow the conventional method of approaching the issue of employment as a task of finding a job for the purpose of making money. This section of the course will focus on assisting students identify their values, interests, talents, skills, strengths and authentic beliefs and the appropriate characteristics and demands (projected support needs) of their "life work." The characteristics of various types of workforce participation will be examined. Life work

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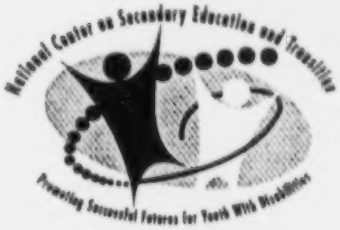
options and the supports and skills necessary for them, in government, corporations, small business, and the non-profit sector will be researched, explored and discussed. The emphasis will be on encouraging students to determine what types of life work are likely to facilitate satisfying participation in the working world and the skills needed to advocate to necessary supports. This empowering "consumer centered" orientation towards the creative pursuit of satisfying life work is consistent with the principles of self-advocacy and self-determination. This strategy teaches students to understand what is possible and appropriate and what enhances the likelihood they will identify and pursue life work that is supportive and consistently rewarding to them. Module three consists the following:

- **Self-assessment of Interests, Values, Strengths, Supports, and Goals**. A variety of inventories and assessments will be used to help students gain self-awareness by reviewing their values, beliefs, strengths, interests and goals and support needs and relate each to prospective life work choices. These materials will be completed prior to each class and serve as catalyst for facilitated small and large group discussion. Peer to peer observation, feedback and supportive criticism will be encouraged in small groups and in the forum at large. Ultimately, these materials will ask students to describe specific life work scenarios that are appropriate, desirable and attainable. Once this is accomplished, curriculum will offer a strategic, systematic approach to achieving goals in stages—reasonable steps—over a period of time.
- **Knowledge of the Life Work Sectors.** In conjunction with the above assessment process, information will be shared about the qualities and expectations of various existing work sectors, including the provision of supports in the workplace. The rewards and challenges of each sector will be discussed as will the personal attributes and skills necessary to succeed within them. The overview will include discussions of life work in the following sectors: government, non-profit, self-employment, corporate, and small business. Persons with disabilities working in each of these sectors will be invited to the course to discuss the rewards and challenges of their life work choice and the training and skills/supports necessary to succeed.
- **Keeping Track: Daily Life Narrative and Life Course Charting.** Students will continue to apply the "life narrative skills" and "life course awareness" developed in Modules One and Two. They will continue to plot their daily experiences on a Life Course Chart that requires them to assign a value to the level of life satisfaction they experienced on each day. The maintenance of a daily journal is encouraged to record the significant events of each day. Group discussions of the students' charts and selected narratives will be a part of each class period.

The development of this paper was completed as part of the Strategic Program of Research for the National Center for the Study of Postsecondary Educational Supports (NCSPES) at the University of Hawaii at Manoa, which is a Rehabilitation Research and Training Center (RRTC) funded by grant # H133B980043 from the National Institute on Disability and Rehabilitation Research (NIDRR) within the US Department of Education. Opinions and views offered within this paper are those of the researcher involved and no endorsement is implied by the funding agent.

Findings Implication Brief
National Center for the Study of Postsecondary Educational Supports (NCSPES)
University of Hawai'i at Manoa

Issue Area: Self-determination and Self-Advocacy Skills



Author: Margo Vreeburg Izzo, Ph.D.

Summary of the Issue:

Students with disabilities often experience barriers to gaining the supports and services that they need to be successful within the educational setting. Many students with disabilities are not fully aware of their strengths, limitations and needs. They have difficulty self-advocating and coordinating the necessary services and supports to accomplish their goals. Using self-management strategies, making decisions and evaluating their own performance are skills students need to successfully complete their course-of-study. These skills are often described as self-determination.

Self-determination is a combination of skills, knowledge and beliefs that enables a person to engage in goal-directed self-regulated behavior (Field, Martin, Miller, Ward, & Wehmeyer, 1998). These authors view self-determination as a process that consists of six components: self–awareness, self–advocacy, decision making, independent performance, self -evaluation and adjustment. According to Wehmeyer and Schwartz (1995) students who obtain self - determination skills while attending school have a greater chance for success than students who do not acquire these skills. Although each component of self-determination is essential for life-long success, self-advocacy is a critical skill for postsecondary students with disabilities who find themselves working with teachers who have not had the opportunity to learn about diverse teaching strategies, disabilities and accommodations. Being able to disclose a disability and present oneself in a positive light enhances students' self-esteem. Self-determined students approach sharing their personal experiences and educating others with a greater degree of self-assurance.

Study Questions/Method:

The purpose of this study is to examine the postsecondary environment from the perspective of students with disabilities and the faculty who teach them. Two strategies were used: (1) a quantitative survey assessed the experiences of faculty and students across the campus, and (2) in-depth focus groups gained the perspectives of faculty, students with disabilities and students without disabilities within 3 departments. The research questions explored follow:

(1) What are the college experiences of students with disabilities, including faculty members' attitudes and teaching strategies?

(2) What skills and behaviors do students with disabilities need to posses to successfully navigate postsecondary environments?

(3) What recommendations are suggested by students and teachers to improve the quality of the educational experience?

Survey. The primary purpose of the survey is to provide a platform for university departments/units to have "strategic planning" data gathered for their use in developing and assessing their programs. Prospective respondents were first solicited through e-mail. They were asked to click onto a website to complete the survey on-line. Reminder e-mails were sent if respondents did not reply within a three-week period. Following this web-based collection period, attempts were made to contact non-respondents by telephone. Telephone interviews were conducted during February and March, 1999. Of the 1,339 respondents, 850 persons (63%) completed the OSU Poll through the Web site and an additional 489 telephone interviews were completed.

Focus Groups. The qualitative research method of focus groups was used to explore and discover the climate of the department towards disability issues from three perspectives: faculty members and teaching assistants, students with disabilities, and students without disabilities. Focus group questions for each target audience were prepared to explore the following four areas: types of accommodations requested by students and provided by faculty and/or disability service providers; specific learning styles and teaching strategies used; experiences with students disclosing their disability and/or requesting accommodations; suggestions and recommendations for improving the quality of education within the department and across the campus. Ten focus groups were conducted with 33 students and 24 faculty.

Findings:

A representative sample of 1,339 faculty and students at Ohio State University (OSU) were asked a variety of questions to assess their attitudes towards and experiences with students with disabilities.

- Almost two-thirds of the faculty respondents (62.3%) reported positive experiences with students with disabilities while less than 5% of the faculty

respondents reported negative experiences. The majority of undergraduate students (52.5%) reported neutral experiences.

- Faculty members were asked what would be most helpful to them to teach and accommodate students with disabilities. The most frequent response (31.8%) was specific information on how to handle each disability. Another relatively common answer (9.1%) was better information about available resources.

- Only 21% of the faculty reported that they do have an accommodation statement on their syllabi. Conversely, over three-quarters of the faculty respondents do not provide notice that accommodations are available for students with disabilities.

From an analysis of the focus group transcripts, the following findings were gleaned:

- Select faculty use a variety of teaching strategies such as assessing students' learning styles and teaching to the most preferred styles, publishing lecture notes on-line, and meeting with students individually to coordinate accommodations.

- Students who have advocated for themselves reported having more positive experiences. One student commented "The key to the proctor sheets is getting them in early and giving teachers time. I even sit down with them and help them fill it out. I try not to make them feel rushed." (student, personal communication, February 9, 2000).

- A number of faculty responded that they want students to advocate for themselves, as reflected in the following two comments: "To me it makes a big difference when they come to you at the beginning of the quarter and they are registered with ODS. In general, students need to be able to approach you. They also need to be an advocate for themselves" (faculty member, personal communication, February 29,2000) and another faculty commented, "I think it's primarily the students' issue. We would love to help. We are willing to cooperate, listen, and help" (faculty member, February 29, 2000)

- Many faculty and students agree that open, honest communication between students and faculty is essential to creating a positive learning climate in the classroom. Yet many students revealed that they are not comfortable disclosing they have a disability to faculty.

Implications by Audience:

Many incidents occur among faculty and students that promote a positive postsecondary experience for students with disabilities. Many faculty simply need to become aware of student needs and gain the support services to provide reasonable accommodations. When students approach faculty with a clear

statement of why they need certain accommodations, and the appropriate documentation to verify their accommodation (i.e. letter from ODS), then the majority of faculty willingly provide the necessary supports.

Students:

- Students need to be able to communicate their strengths, limitations and the accommodations they require to navigate educational settings. They need the negotiation skills to gain the services and supports they are entitled to receive.

- A student can help teachers understand how they can help him/her learn best. Students themselves are a powerful training resource to improve the quality of education they receive.

- Students have the right to confidentiality and respect at all times.

- Students need to be in charge of creating the perception of their strengths, limitations and needs and how the postsecondary experience enhances their ability to meet career and life goals, especially when they enter classroom settings where teachers have not had students with disabilities enroll in their courses.

Educators and Transition Specialists:

- School personnel have the responsibility to teach students with disabilities about their strengths, limitations and approved accommodations and supports needed to navigate the general curricula. Students must have the opportunity to practice negotiating their own accommodations prior to entering postsecondary education.

- Educators have the right to request and receive documentation that lists the approved accommodations and the support to deliver these accommodations.

- Educators have the right to receive training and support to deliver the accommodations necessary from the designated office, typically the special education department within secondary programs, and the Office for Disability Services within postsecondary programs.

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The above study was funded in part by Grant P333990046-00 from the Office of Postsecondary Education, U.S. Department of Education.

Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa

Issue Area:

Self-determination and self-advocacy strategies are now being positioned within postsecondary settings in an attempt to increase the number of students with disabilities who attend colleges and universities and improve graduation rates. Researchers suggest using self-determination curriculum as a cultural empowerment strategy to enable students with disabilities to persist in an postsecondary education, and graduate with a degree.

Author(s): Brian Shaughnessy, J.D.
and JoAnn W.L. Yuen Ed.D.

Summary of the Issue:

Secondary students with disabilities:

Continue to lag behind their non-disabled counterparts in education and employment;

Have poor postschool outcomes. An average of 22% of all students with disabilities drop out of school compared to only 12% of their peers without disabilities (Benz & Halpern, 1987);

Lack the variety, frequency and latitude of learning opportunities that allow them to experiment with behavioral options (Ward and Kohler, 1996, p. 288).

In postsecondary education, while improving, are still 50 percent lower than that of the general population (Stodden and Dowrick, 2000; OSEP, 1992).

Education and support strategies:

Have failed to produce coordinated and integrated improvements that accommodate and support students with disabilities in learning rigorous, standards-based curriculum (Berliner & Biddle, 1996; Edgar, 1997; Hatch, 1998; USDOE, 1995, 1996; Waldron & McLeskey, 1998)

Have been unable to integrate students with varying abilities into core high school academic programs have been hindered: by a shortage of financial and professional resources; and an inadequate research base (Jorgensen, 1997; Oakes & Wells, 1998; Vaughn, Schumm, & Brick, 1998).

Study Questions/Method:

What types of preparation in secondary school must students with disabilities have in order to transition into postsecondary school, and succeed as advocates for their own educational supports?

Are you studying secondary schools- I believe that will be an implication or result of your study of your study.

What skills do students with disabilities need to possess to successfully advocate for their own educational supports and subsequent workforce settings?

What skills do students with disabilities need to possess to develop internal locus of control and increase cultural capital in postsecondary settings?

What is the impact of a locus of control/cultural capital intervention during postsecondary education upon the development of individual empowerment and self- advocacy skills in students with disabilities?

How do internal and external "locus of controls" relate to the outcomes of postsecondary students who have disabilities?

Again I haven't seen a research design that supports this question. It might be a follow- along study.

How does capital culture relate to the outcomes of postsecondary students who have disabilities?

As just above.

Qualitative Instruments. The qualitative method will also be used to understand the effect of the intervention—self-determination curriculum by listening to the voices of students with disabilities. Case studies will be used in conjunction with life course charting.

Quantitative Instruments. Two quantitative instrument will be used, a "self-awareness instrument" and an "internal locus of control assessment".

Findings:

Assisting students with disabilities in postsecondary education involves more than implementing a curriculum. Four responses are needed to effect positive outcomes: implement a curriculum that supports student with disabilities; faculty become the important link between the student and the institution, improve the range of related supports and services; and develop a seamless system of coordinated support that originates within the classroom.

Develop a curriculum designed to fit existing courses and established curricula with the tools and teaching strategies necessary to enhance a student's self-determination and self-advocacy skills.

> Self-determination and self-advocacy strategies need to become mainstreamed and communicate perspectives in prime time campus venues.
>
> As students with disabilities transition out of secondary education is important to continue to increase the variety, frequency and latitude of learning opportunities to reinforce the concept of self-determination and self-advocacy and enable students to continue to create successes in their lives.
>
> Include choice and control in programming for students with cognitive and developmental disabilities. Provide unsheltered settings so students with disabilities can experience success in competitive and natural environments.

Teach using a philosophy that celebrates the disability culture and knowledge, promoted by faculty [across departments] who are empowered to support a student's sense of worth and academic ability and strengthen a student's sense of control over their environment.

> Faculty are the primary agents to build student involvement. In order these students are to get involved in the college and university community, the involvement may have to begin and be sustained in the classroom.
>
> Students who feel valued by their institution may have a stronger commitment to the institution and graduation than individuals who do not feel valued. Non-traditional students, in particular, need someone to take the initiative and reach out to engage them.

Frequent student-faculty interactions appear to have positive effects on student retention.

The classroom becomes the common ground for all students, academic learning may open doors to social integration and integration is one key to retention and graduation.

Develop related services and supports available on campus for students with disabilities.

Unlike secondary students who are identified as having a disability, postsecondary students can remain invisible on a campus. It is necessary to have a range of service options available to serve a student population that is hard to reach and may not know how to reach out.

Non-traditional students appear to expect institutions to take the initiative in assisting them. In order to support postsecondary students, institutions need a range of supports—reinforced through services, curricula, pedagogy—designed to reach out to, engage and teach students with disabilities.

Create a seamless system of coordinated services.

The University of Hawaii (UH) does not have special admission policies to assist in the recruitment and retention of students and support services. The retention and persistence of students needs to become a campus-wide priority and backed by the institution with a funding commitment.

Service support mechanisms exist on college campuses and programs may appear at-odds or uncoordinated because they compete among themselves for limited funds. It is critical for students to have a range of supports at their disposal—supports that appear seamless and reinforce each others efforts.

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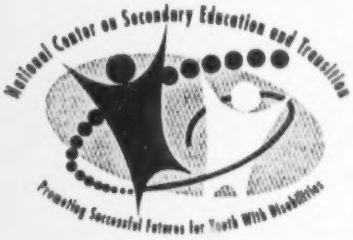
Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa

Issue Area: *A 20/20 Analysis of Postsecondary Support Characteristics*



Author(s): Michael N. Sharpe, David R. Johnson,

Summary of the Issue: The objective of this research effort, *A 20/20 Analysis of Postsecondary Support Characteristics* is to provide information about the range of support options available to students with disabilities in postsecondary institutions nationwide. Representing Year I of a three-year study, *Longitudinal Analysis of the Experiences of Students with Disabilities with Postsecondary Support Service Systems: Characteristics of Effective Support Systems*, the overall goal of this research is to identify effective components of support services in relation to student outcomes. To accomplish this task, two basic research strategies either will be, or have been, employed: (1) an examination of student outcomes by conducting a "20/20" analysis of support service characteristics, and (2) an examination of input and process variables that lead to the identification of effective components of support services. A 20/20 analysis approach is utilized in the current study to describe the range of support options (e.g., "capacity") available within various types of institutions (e.g., 2 year, 4 year) and the extent to which supports systematically vary as a function of institution type.

Study Questions/Method: Three main questions are to be addressed in the longitudinal study: (1) How does support service capacity impact consumer perceptions of access, satisfaction, and anticipated postschool outcomes?; (2) What characteristics of postsecondary support service capacity that are most likely to result in high levels of consumer access, satisfaction, and positive perceptions of postschool outcomes? and (3) What aspects of support service capacity are considered most effective in terms of carryover to subsequent employment? In a *20/20 Analysis of Postsecondary Support Characteristics*, we have selected a sample of the Top 20%" and the Bottom 20% of institutions representing high and low levels of support services based on "capacity" ratings obtained from data collected through the *NCSPES 1999 National Survey of Post-Secondary Educational Support for Students with Disabilities*. A method used initially by Reynolds (1993) to examine characteristics of high and low academic achievers, 20/20 analysis is applicable to a wide range of phenomena, including the study institutional characteristics. The objective of this approach is to "look at the margins" to study differences between the "Top" and "Bottom" 20% of a institutional sample to identify key variables which may account for differences in service capacity and eventually, consumer satisfaction and outcomes.

Findings: Initial findings indicate that the Top 20% group (N=139) obtained average "capacity" ratings about one standard deviation above the overall average. In contrast, the capacity ratings of the Bottom 20% were found to be well below this threshold. Less variability was observed in the Top 20% group, suggesting that these institutions tend to be more "consistent" with regard to the range of services provided to students with disabilities, while the Bottom 20% (N=140) appears to be more variable in this regard. This finding was generally repeated when the initial sample was partitioned into groups based on other institution "types." That is, similar results were observed whether the analysis was conducted with only 4-Year or 2-Year institutions, public or private, or profit or nonprofit. To a large extent, the results of the 20/20 analysis magnify the findings of the National Center for Education Statistics in the report, *An Institutional Perspective on Student with Disabilities in Postsecondary Education* (U.S. Department of Education, 1999). That is, public institutions in general more likely to provide more services to students with disabilities and large public institutions in particular are more likely to demonstrate greater overall capacity. Although preliminary at this point, there appears to be some evidence that greater levels of "capacity" (i.e., range of service options provided to students with disabilities) may not always be reflected in lower staff-to-student ratios for all institutional types. That is, on average, public 4-year institutions tend to have higher staff-to-student ratios than public 2-year or non-profit 4-year institutions. Follow-up analysis is currently being conducted to examine this issue more closely.

Implications by Audience: While tentative at this point, students with disabilities and those who provide them with secondary transition services, need to consider the type of institution students will be entering as they continue their postsecondary studies. In general, public 4-year and 2-year postsecondary institutions tend to demonstrate greater levels of capacity and hence, are more likely to provide testing accommodations, notetakers, tutors, career counseling, vocational assessment services and the like. While a number of private, nonprofit 4-year and 2-year institutions offer similar services, these generally tend to be more variable and limited in scope. As such, it is incumbent upon students and those who serve them develop a knowledge base about the level of services available to facilitate the transition to postsecondary education. The next phase of this study will examine issues of consumer access, level of satisfaction, and perspectives in an effort to ascertain the general relationship of capacity to outcomes for students—e.g., "Does more capacity necessarily mean better outcomes for students?"

Contact Information: Any comments or ideas regarding this study are welcome. Please contact Michael N. Sharpe at the Institute on Community Integration at the University of Minnesota. Phone (612-626-8155) or e-mail (sharp004@tc.umn.edu). Mailing address:

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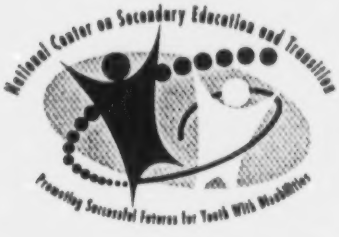
Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa

Issue Area: Models of Postsecondary and Employment Success; Study 3



Author(s): John Anderson & Teresa Whelley

Summary of the Issue: It is important to identify effective supports and models of support delivery that improve postsecondary access, participation and success for students with disabilities. As the goal of these supports and services is to improve educational and employment outcomes, success for their consumers in school and the workforce would be an integral measure of their effectiveness. This necessitates a close, in-depth study of individual student cases, or *success stories*, to tease out the effective supports and services among the many variables that contribute to success. Case studies of successful students are also instructive because this is where the support system ultimately functions—at the level of each individual student.

Study Questions/Method:

- What supports have actually been effective in helping people with disabilities to successfully complete their postsecondary education and to subsequently obtain meaningful employment?
- To what extent do successful students with disabilities attribute their success to the supports and services they received?
- What were the supports that students needed that were not available?
- What are the exemplary models of people with disabilities who have successfully negotiated postsecondary education and have obtained quality employment? How might these models help to guide and support current and incoming students?
- Successful student informants are selected using a questionnaire. Informants are interviewed individually in two stages, using findings from the first interview to inform the second. Results are then analyzed qualitatively. A case study will be prepared for each informant and overall findings will be summarized across the case studies.

Findings:

- Not yet available.

Implications by Audience:

- The findings of this study should be of particular interest to postsecondary disability service providers, faculty, vocational rehabilitation counselors, students with disabilities, and potential employers.

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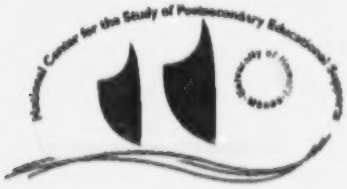
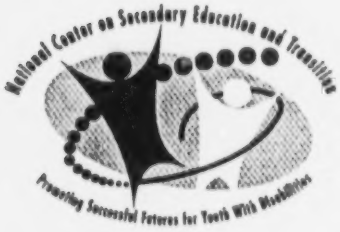
Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa



Issue Area: Effective instructional strategies for students with learning disabilities in postsecondary education



Author(s): Getzel, E.E., Wehman, P., & McManus, M.S.

Summary of the Issue: Although there has been an increase in the number of students with learning disabilities entering colleges and universities, limited numbers of students are completing their programs (Wille-Gregory, Graham, & Hughes, 1995). There are several factors that contribute to low retention and completion rates (Aune, 1991) which make it exceedingly challenging for these individuals to complete postsecondary educational programs. In many instances, students may be hampered by varying or limited support services, large student-instructor ratios, and limited direct student-instructor contact which result in insufficient individualized attention (Stodden, 1999). Additionally, students with learning disabilities in higher education settings often face obstacles in the form of negative or prejudicial attitudes held by faculty members, administrators, and other members of the student body (Greenbaum, Graham, & Scales, 1995; West, et al., 1993).

To help students with learning disabilities participate in higher education programs, three primary considerations emerge: obtaining detailed information on the unique characteristics of the students, developing specific educational interventions based on the students' characteristics, and providing information and support to students on effective educational strategies. In an effort to ensure that these areas are fully addressed at VCU, an Educational Intervention Model for students with learning disabilities has been developed.

Study Questions/Method:

1. What is the range of educational supports needed by students with learning disabilities to successfully complete their postsecondary education program?
2. What are the barriers for succeeding in a postsecondary environment as perceived by students with learning disabilities?
3. What strategies or accommodations do students believe work in overcoming these barriers?

The study will use an intact cohort design to obtain data on the success of the educational intervention strategies. A cohort of 60 students will be recruited to participate in the study. All participants will receive assistance over the course of the study. Data will be collected through the use of an Academic Support Plan, which is developed by the student with assistance from the research staff. The frequency and intensity of the educational supports will be documented on this plan. At the end of each academic year, the cohort will be divided into two groups based on the intensity and frequency of services. A comparison will be made between the two groups to determine the level of success (i.e. GPA, academic progress, retention) among the group participants. In addition, because of the individualized nature of this study, developing and implementing specific educational supports for students with learning disabilities, the study requires a method that captures the individualized nature of the supports provided and the students' satisfaction with the interventions designed. Focus group procedures have been selected as the primary method for collecting information (Krueger, 1994; Marshall & Rossman, 1995; Wheeler, 1996). This method was selected because focus groups allow for a detailed, more in-depth process to collect information on the students with learning disabilities (Patton, 1990).

Detailed case studies will also be developed to document the specific educational supports and accommodations that were provided during the study. The case studies will help to illustrate the range of supports provided and how these supports were implemented.

Findings:

The study has begun compiling initial data on the educational strategies that have thus far been developed for students. This information can be found in the attached table.

Implications by Audience:

The study will provide specific information on successful educational interventions used by students with learning disabilities in college. Retention and graduation rates of <u>all</u> students are national concerns for colleges and universities. These rates are particularly discouraging for students with learning disabilities. By using an educational coaching model where students receive structured support by staff, data collected on the frequency and intensity of services and their impact will provide a wealth of information on effective

approaches that enable students with learning disabilities to achieve academic success in higher education.

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Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa

Issue Area: Workplace and Postsecondary Supports Study 4

Author(s): Lynn Nakahara

Summary of the Issue:

Despite an increase in the number of postsecondary students reporting a disability, the enrollment of people with disabilities is still 50% lower than the general population. This gap in educational attainment affects the long-term employment prospects of people with disabilities. The Rehabilitation Research Training Center (Virginia Commonwealth University) focused on the facilitation of four Participatory Action Teams (PAT) concentrating on documentation guidelines, cooperative agreements, data collection and evaluation, and information technology access.

Study Questions/Method:

- What are factors affecting the enrollment of people with disabilities in postsecondary institutions?
- What are identified barriers faced by students with disabilities within the postsecondary education setting?
- What are improvements that can be implemented within institutions regarding documentation guidelines, interagency agreements, data collection and evaluation, and the information technology access act?

Findings:

- The Virginia Commonwealth University Higher Education Workgroup (PAT) has 30 members and meets quarterly.

- The Documentation Guidelines PAT has completed a draft of guidelines for documentation of a disability that will incorporate best practices and provide clear standards for service providers.
- After determining financial costs for accommodations and reviewing inequities in distribution of funds, a draft agreement was developed by the Interagency Agreements PAT.
- The Data Collection PAT is working on disseminating a statewide satisfaction survey of students with disabilities in higher education to be compared to a similar survey conducted 10 years ago.
- The Information Technology Access Act PAT has focused on broadening the scope of the state law to include persons with all disabilities, clarifying how the law impacts higher education, identifying accountability procedures, and determining what information universities need to comply with this law.

Implications by Audience:

- Need to address issues of how students with disabilities will self-advocate for requests in postsecondary institutions.
- Need for students with disabilities to identify accommodations necessary for education in postsecondary institutions.
- Need to identify postsecondary institutions that have clear documentation guidelines of disabilities to ensure that students with disabilities will receive proper services and aid.
- Need to focus on postsecondary institutions with comprehensive career planning for students with disabilities.
- Need to coordinate services and supports in postsecondary institutions necessary for the success of students with disabilities.

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Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa

Issue Area: Trends in Postsecondary Education Services in the Vocational Rehabilitation System for Individuals with Disabilities - Study 5

Area(s) of study: Postsecondary Education Supports & Employment

Author(s): Dana Gilmore, Jennifer Shuster, Debra Hart

Summary of the Issue: Several federal statutes mandate equal access to services at postsecondary education institutions and are intended to improve outcomes for individuals with disabilities (i.e., Individuals with Disabilities Act of 1997 (IDEA 1997), the Rehabilitation Act of 1995 and the inclusion of the Rehabilitation Act Amendments in the 1998 Workforce Investment Act, and the Americans with Disabilities Act). Therefore, it is critical to understand the impact that these laws have on assisting individuals with disabilities in gaining access to and in completing a postsecondary education and, ultimately, in securing employment. In an effort to determine the impact these laws have had on creating greater access to, retention in, and completion of a postsecondary education a secondary data analysis will be conducted of elements of the national Rehabilitation Services Administration's (RSA) database to identify state trends in postsecondary education services and supports for individuals with disabilities overtime through the Vocational Rehabilitation System.

Study Questions/Method:

- Has there been a change overtime in the services offered by the Vocational Rehabilitation system that support students with disabilities in postsecondary education?

- What is the cost per case for postsecondary education services for students with disabilities?

- Has the IDEA 1997,the Rehabilitation Act Amendments of 1995 and the inclusion of the Rehabilitation Act Amendments in the 1998 Workforce Investment Act had an impact on postsecondary education services for individuals with disabilities?

Findings:
Analysis not complete at this time

Implications by Audience: (projected implications prior to final analysis)

- The need for the vocational rehabilitation system to provide a greater number of supports to individuals with disabilities in postsecondary education and employment.
- The need for VR counselors to view postsecondary education as a linkage to employment for individuals with disabilities.
- The need for consumers, teachers, school counselors, families, special education personnel to learn about the vocational rehabilitation system and how to advocate for postsecondary education and employment services.

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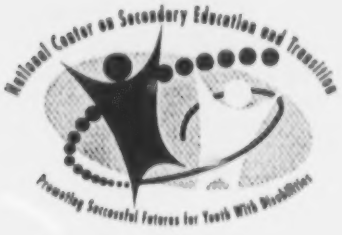
Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa



Issue Area: Study 6
Disability Support Coordinator Characteristics

Author(s): Chuan Chang, PhD Candidate University of Hawaii, Manoa, CDS, RRTC

Summary of the Issue:

There is scant literature regarding the current practices of offering educational supports to students with disabilities at the postsecondary level. A national survey was conducted and provides important information for researchers seeking to ascertain the current status of educational supports in postsecondary programs. Information shared in this brief focuses on a comparison of the educational supports offered by public and private postsecondary programs. By understanding and sharing the strengths and weaknesses of educational support provisions within public and private postsecondary programs, students with disabilities would be able to choose the programs that suit them.

A survey was conducted of a representative national sample of disability support coordinators as found in two-year and four-year postsecondary educational programs, as well as private and public institutions. An overall cross-tabulate analysis was conducted to provide a comprehensive baseline of data regarding the characteristics of disability support coordinators found in postsecondary education.

Study Questions/Method:

What are the demographic and professional characteristics of disability support coordinators working in postsecondary educational settings?
To answer the research questions posed above, quantitative research method was utilized. A survey instrument was developed, piloted and distributed to a national sample of more than 1500 disability support coordinators within post-secondary

education programs. 650 respondents completed the survey providing a profile of educational support provision within postsecondary educational programs. The respondents in our data analyses were profiled as follows: 422 were from public postsecondary institutions vs. 193 private post-secondary institutions; 246 were from two-year or less than two-year postsecondary programs vs. 369 four-year programs. Survey questions focused upon the characteristics of disabilities support coordinators provided information regarding the level of training and experience of personnel working these roles in the postsecondary education.

Findings:

How many years have you worked in your present position?

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 5 years	301	46.3	48.2	48.2
Five to ten years	169	26.0	27.0	75.2
More than ten years	155	23.8	24.8	100.0
Total	625	96.2	100.0	
Missing	25	3.8		
Total	650	100.0		

Almost 50% of the disability support coordinators surveyed has been employed in their current position for less than 5 years. This finding illustrates the newness of disability support provision in postsecondary educational settings and that coordinators are often uncommitted in their career plans.

How many years have you worked in the area of student services in a postsecondary program?

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 5 years	155	23.8	24.9	24.9
Five to ten years	202	31.1	32.5	57.4
More than ten years	265	40.8	42.6	100.0
Total	622	95.7	100.0	
Missing	28	4.3		
Total	650	100.0		

Over 40% of the respondents indicated they had more than 10 years experience working in postsecondary education student services programs.

In what discipline or field did you receive your training?

	Frequency	Percent	Valid Percent	Cumulative Percent
Education	165	25.4	28.9	28.9
Arts and Sciences	81	12.5	14.2	43.1
Counseling/Psychology	204	31.4	35.7	78.8
Vocational/Adult	31	4.8	5.4	84.2
Related Disability Services	90	13.8	15.8	100.0
Total	571	87.8	100.0	
Missing	79	12.2		
Total	650	100.0		

Over 50% of the responding disability support coordinators obtained degrees in the areas of education and psychology, fields directly related to the provision of supports. The field of disability support provision does not exist as a university degree program, yet around 15% of the respondents indicated they had taken degree training in a disability related field such as, physical therapy, speech pathology, disability studies, or adaptive physical education.

What is your highest degree earned?

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than a baccalaureate	11	1.7	1.8	1.8
Baccalaureate	52	8.0	8.6	10.4
Master's	442	68.0	72.9	83.3
Doctoral	101	15.5	16.7	100.0
Total	606	93.2	100.0	
Missing	44	6.8		
Total	650	100.0		

Almost 90% of the respondents indicated they had obtained a Masters Degree or higher at the time of the survey (73% with a Masters degree and 16% with a doctoral degree). This data indicated that the majority of disability support coordinators in postsecondary education settings have a high degree of professional training, although in many cases the training was not in a field focused upon the provision of educational supports for students with disabilities in postsecondary education settings.

Prior to your current position, did you have experience as an

(1) Instructional faculty member

	Frequency	Percent	Valid Percent
No	381	58.6	58.7
Yes	268	41.2	41.3
Total	649	99.8	100.0
Missing	1	.2	
Total	650	100.0	

Almost 60% of the surveyed coordinators had no experiences as instructional faculty members.

(2) Equal opportunity / ADA compliance officer

	Frequency	Percent	Valid Percent
No	585	90.0	90.1
Yes	64	9.8	9.9
Total	649	99.8	100.0
Missing	1	.2	
Total	650	100.0	

90% of the surveyed coordinators had never been an equal opportunity / ADA compliance officer before. This implies that most Disability Support Coordinators may not have the background to adapt / adjust themselves to the new positions quickly nor possess the knowledge to assure federal law compliance campus–wide.

Implications by Audience:

The findings clearly indicate that disability support provision is a new area in postsecondary education. Even though over 40% of the surveyed disability support coordinators had more than 10 years experience working in postsecondary education student service programs, only 24% of them worked in the area of disability support for more than 10 years, and over 50% of them worked less than 5 years in such positions.

- The data here imply a need for information dissemination among people who work in the disability support provision area and training of new coordinators.
- More information about the research in the area of disability studies needs to be shared or exchanged.
- More training should be provided to the coordinators regarding the knowledge of disabilities, policies and law on disability support provision.

- Secondary Education Students, parents, teachers and counselors need to know that Disability Support Personnel vary, with experience and training, and to choose their college accordingly.

- Secondary Education Students need to match their support needs with the expertise of the Disability Support Coordinator before admission.

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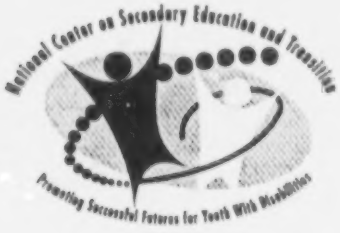
Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa



Issue Area: Study 6
Public postsecondary programs vs. private postsecondary programs.

Author(s): Chuan Chang, Ph.D Candidate University of Hawaii, Manoa, CDS, RRTC

Summary of the Issue:

There is scant literature regarding the current practices of offering educational supports to students with disabilities at the postsecondary level. A national survey was conducted which provides important information for researchers seeking to ascertain the current status of educational support offerings in postsecondary programs. Information shared in this brief focuses on a comparison of the educational supports offered by public and private postsecondary programs. By understanding and sharing the strengths and weaknesses of educational support provisions within public and private postsecondary programs, students with disabilities would be able to choose the programs that suit them.

Study Questions/Method:

1. How do private postsecondary programs compare to public postsecondary program when offering educational supports and accommodations to students with disabilities?
2. What are the strengths and weaknesses public and private postsecondary programs bring to the provision of educational supports for students with disabilities, and what can be learned from each of these program types?

To answer the research questions posed above, quantitative research method was utilized. A survey instrument was developed and distributed to a national sample of more than 1500 disability support coordinators within post-secondary education

programs. 650 respondents completed the survey providing a profile of educational supports offered. The respondents in our data analyses were profiled as follows: 422 public vs. 193 private post-secondary institutions, 246 two-year vs. 369 four-year institutions.

Chi-square test was performed for questions with categorical data (e.g., yes or no). One-way ANOVA analysis was performed for questions with numerical (accumulated questions) or ordinal data (e.g., the rating scale of 0, 1, 2, 3, and 4), to compare the average means on each specific question between the two group of public and private programs.

Findings:

- The survey studied the capacity of postsecondary institutions to offer a wide range of supports to students with disabilities.
  Public institutions were rated significantly higher (more often) than private institutions when offering:
  - Priority registration / course scheduling
  - Testing accommodations
  - Disability-specific scholarships
  - Disability-specific assessment / evaluation
  - Learning center laboratory services
  - Developmental / remedial instruction
  - Interpreter / translator
  - Notetakers / scribes/ readers
  - Real-time captioning services
  - Career / vocational assessment and counseling
  - Facilitate transfer of supports to work setting

  Public institutions were rated significantly higher than private institutions when offering Assistive technology supports (consists of 6 sub-questions concerning AT supports) to students with disabilities. But the two groups didn't differ in offering skill development for students with disabilities.

- Public institutions were rated significantly higher than private institutions when offering overall distance-learning access and support to students who are deaf or blind.

- Public institutions rated significantly higher than private institutions in the offering of community outreach programs or linkages for students with disabilities.

- Public institutions rated significantly higher than private institutions when offering supports such as providing materials and training activities to aid faculty / staff in working with and teaching students with disabilities.

- Public institutions rated significantly higher than private institutions when focusing on the conduct of program evaluation of their disability supports and services.

- Public institutions developed and made available to students and faculty written policies significantly more often than private institutions.

- Public institutions supported advocacy organizations and activities on campus more often than private schools, even though most of the postsecondary institutions (73%) didn't have an advocacy organization on campus for students with disabilities.

- Public institutions had a significantly greater number of advisory committees and activities on campus, with a focus on students with disabilities, than private institutions.

- The areas that private institutions rated significantly higher than public institutes were in the following areas:
  -- Offering of opportunities and supports for study abroad (it was offered less than 25% of the time among public institutions vs. more than 25% of the time among private institutions).
  -- Offering of internship /externship opportunities and supports specific to the needs of students with disabilities.

Implications by Audience:

- The findings clearly indicate that private postsecondary institutions do not adhere to the same level of support offering provided by publicly funded institutions. Private institutions need to be aware that they are behind in disability support provisions at the postsecondary level.
- Students with disabilities attending private institutions need an appropriate range of educational support offerings, and as the private institutions receive federal money, they should comply with federal policies to offer educational supports and accommodations to students with disabilities.
- Secondary students with disabilities and their parents and secondary educators should be informed of the difference in educational supports offered by these two types of institutions, and choose the programs that best fit them.
- The secondary counselors should also be aware of the differences in order to assist their students with information and advise students to investigate supports at individual colleges.

It is possible that students with disabilities eventually leave private institutions and attend schools that respond to their needs. Also, students with disabilities attending private postsecondary institutions may have support mechanisms beyond that provided by the school (strong family, community support).

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Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa

Issue Area: Study 6
Written policies regarding educational supports

Author(s): Chuan Chang, Ph.D. Candidate
University of Hawaii, Manoa, CDS, RRTC.

Summary of the Issue:

There is scant literature regarding current practices of providing educational supports to students with disabilities at the postsecondary level. A national survey was conducted and provides important information for researchers and service providers seeking to ascertain the current status of educational support offerings in postsecondary programs. The overall survey data and various sub-analyses provided a comprehensive baseline of data to address issues concerning educational support provision in postsecondary education. Information shared in this brief focuses on development and implementation of written policies regarding students with disabilities in postsecondary education and implications.

Study Questions/Method:

1. Have postsecondary educational programs developed and implemented written policies concerning the provision of educational supports to students with disabilities?

2. Do different postsecondary programs (e.g., public vs. private) differ from one another in their provision of written policies on educational supports to students with disabilities?

To answer the research questions posed above, quantitative research method was utilized. A survey instrument was developed and distributed to a national sample of more than 1500 disability support coordinators within post-secondary education programs. 650 respondents completed the survey providing a profile of educational

supports offered. The respondents in our data analyses were profiled as follows: 422 public vs. 193 private post-secondary institutions, 246 two-year vs. 369 four-year institutions.

One of the survey questions asked:
"Please indicate whether your unit or institution has written policies on any of the following when providing supports to students with disabilities?"

Findings:

The table below shows the percentage of postsecondary institutions that have written policies regarding educational supports to students with disabilities.

Written policy	All institutions (n = 650)	Public vs. private		2yr vs. 4yr	
		Public (n = 422)	Private (n = 193)	2yr (n = 246)	4yr (n = 369)
Institutional commitment to provide reasonable accommodations	86.3%	90.8%	86.0%	89.0%	89.4%
Modification of admissions for students with disabilities	26.6%	28.4%	24.9%	26.0%	28.2%
A process for students to declare a disability and request accommodations	86.8%	91.2%	86.5%	85.8%	92.4%
Documentation to establish the existence of a disability and needed accommodations to assure equal access	83.8%	89.8%	80.3%	85.0%	88.1%
Assignment of responsibility for determining disability and related accommodations	77.8%	82.9%	75.1%	80.5%	80.5%
Course waivers / substitutions	46.0%	49.5%	42.0%	43.1%	49.9%
Confidentiality	85.5%	89.3%	87.0%	87.0%	89.7%
Definition of full-time status for students with disabilities	32.2%	35.3%	29.5%	28.5%	36.9%
A grievance procedure regarding disability determination and/or accommodations	71.5%	78.7%	64.2%	74.0%	74.3%
Access to technology	50.2%	58.8%	38.3%	58.1%	48.5%

Most surveyed institutions (70% to 90%) had written policies on general issues concerning the determination of disability and related accommodations.

But for a few key issues to the students with disabilities, less than half of the surveyed post-secondary programs provided written policies, those issues included:

- Modifications of admissions for students with disabilities (26.6%)
- Definition of full-time status for students with disabilities (32.2%)
- Course waivers/substitutions (46%)
- Access to technology (50.2%)

Statistically, more public post-secondary programs had written policies on the following issues than private institutions.

- Documentation to establish the existence of a disability and needed accommodations to assure equal access
- Assignment of responsibility for determining disability and related accommodations
- A grievance procedure regarding disability determination and/or accommodations

- Access to technology

Statistically, more 4-year programs had written policies on the following issues than 2-year programs.

- A process for students to declare a disability and request accommodations
- Definition of full-time status for students with disabilities

However, more 2-year programs had written policies on access to technology than 4-year programs. This finding is consistent with a previous finding that 2-year programs generally more often than 4-year programs in offering assistive technology and learning center lab to students with disabilities.

When comparing numbers of written policies provided by different types of post-secondary programs, public programs had significantly more issues addressed through written policies than private institutions. But there was no difference between 2- and 4-year programs on the number of issues addressed by written policies.

Implications by Audience:

Postsecondary programs tend to have written policies on general issues, such as institutional commitment to provide educational accommodations, and a process for students to declare a disability and request accommodations etc., but seldom address practical issues such as definition of full-time student status through written policies.

The majority of surveyed postsecondary programs didn't have written policies on:

- Modification of admission procedures for students with disabilities (73% said no).
- A definition of full-time status for students with disabilities (68% said no).
- Course waivers/substitutions for students with disabilities (54% said no).
- Access to technology (50% said no).

Whether or not modification of admission procedures should be clearly specified as written policies for students with disabilities is important to both postsecondary programs and the students with disabilities who seek postsecondary education. For the postsecondary programs, the admission procedures shouldn't be used as strategies to screen out most students with disabilities while under the proper "equal access" and "no discrimination" titles. Written policies regarding modifications of application materials, GPA requirements, placement tests, and registration procedures would help reduce and prevent subjective, sometimes unfair decisions and treatments towards the applicants with disabilities. For the students with disabilities who are just out of high school and their parents, the policy on modifications of admission procedures would encourage their further exploration of opportunities with postsecondary education. Clear regulations will benefit both sides in making right decisions.

A definition of full-time status for students with disabilities is another issue important to the success and confidence of students with disabilities in postsecondary programs. As the national survey showed that testing accommodation has been implemented widely in postsecondary programs, however the same argument or reason for implementing testing accommodations didn't seem to take effect when it comes to a definition of full-time status for students with disabilities. As a matter of fact, a full-time student status relates to financial aid, tuition waivers, medical insurance, and maintenance of legal

immigration status for international students. Not having a full-time student status would hurt students in things ranging from academic success to financial security and self-confidence. But adoption of the same full-time student standard (12 credits for undergraduates and 9 credits for graduates) for both traditional students and students with disabilities is inappropriate in many perspectives, especially in light of some existent special speculations concerning the full-time student status, such as students with graduate assistantship can be considered as full-time with 6 credits. Lack of written policy on the definition of full-time status for students with disabilities would not mean equal treatment in any sense; on the contrary, it ignores the differences these students have and challenges they face. A clear definition of full-time student status for students with disabilities simply provides them with an option; an option often makes a great difference in our life. In the same vein, policy on course waivers / substitution for students with disabilities should also be developed.

Only half of surveyed postsecondary programs had written policies on access to technology. Access to technology is the only issue on which significantly more two-year postsecondary programs had written policy than four-year programs. This is consistent with our prior finding that 2-year programs rated significantly higher than four-year programs in the offering of assistive technology supports to students with disabilities. The consistency between policy and practices implied that written policies do effect disability support provisions. The lack of assistive technology availability is suspected to be related to the lack of policies resulting in cost of these accommodations.

As found in a series of focus groups with students with disabilities in postsecondary programs, clear definitions and procedures within the above four areas are viewed as important to ensure equal access and support to succeed in postsecondary education programs. Student experience shows that when policy or guidelines are nonexistent or unclear students with disabilities are often caught in the middle with the various programs and agencies, and therefore hinder their success in postsecondary education.

Secondary school personnel, teachers and counselors need to receive written policies from postsecondary institutions to make informed decisions upon the choice of college.
Parent and students need the polices to plan for their college futures. Awareness of assistive technology, modified admission policies (open admission), definition of fulltime status, course waiver increase the options and confidence for students with disabilities.

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Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa

Issue Area: Survey, Study 6
Comparison of 2- year institutions versus 4-year institutions in offering supports and accommodations for Students with Disabilities

Author(s): Tom Harding, Ph D Candidate, University of Hawaii at Manoa, Center of Disability Studies

Summary of the Issue:

There is very little known regarding current practice concerning the provision of educational supports to students with disabilities (SWD's) at the postsecondary level. A national survey was conducted and provides crucial information for researchers seeking to ascertain the current status of educational supports in postsecondary programs. The survey and the sub-analyses have provided a comprehensive baseline of data to address issues concerning educational support provision.

Study Questions/Method:

How do 2-year institutions compare to 4-year institutions in offering supports and accommodations for SWDs?

A national survey instrument was developed and distributed to a national sample more than 1500 disability support coordinators (DSC). More than 650 respondents completed the survey providing a profile of characteristics. The respondents within the sample were

profiled as follows: 422 were from public schools vs. 193 from private schools; 246 were from two-year or less than two-year schools vs. 369 from four-year schools.

Findings:

When comparing supports within 2-year and 4-year schools, generally speaking, 2-year schools offer more support in most areas surveyed. 2-year schools performed better in the provision of technology and the other following areas:

- Learning center laboratory
- Developmental/remedial instruction
- Equipment or software provision
- Skills training on equipment/software
- AT supports across campus
- Disability-specific assessment/evaluation
- Provision of interpreter/transliterator

Moreover, 2-year schools are better connected *with the community* through better outreach programs with community business/employers, federal programs, parent/family organizations, and consumer advocacy groups

Some of the areas where 4-year institutions offered a greater range of supports than 2-year programs are:

- Class relocation
- Supports for study abroad
- Accessible transport on campus
- Note takers/scribes/readers
- Memory skills & meta-cognitive strategies
- Internships/externships

Two-year schools did significantly better in Assistive Technology (AT) supports than 4-year schools. Further comparing the two types of institutions revealed that the two groups did not differ on providing skills development for students and on services related to employment.

Implications by Audience:

Students with disabilities and those who provide them with secondary transition services, need to consider the type of institution students will be entering as they begin their postsecondary studies. It is apparent that 2-year institutions serve a student population with more diverse learning and behavioral needs than 4-year institutions. In general, public 2-year postsecondary institutions tend to demonstrate greater levels of capacity and hence, are more likely to provide a learning center laboratory,

developmental/remedial instruction, equipment or software provision, and general AT supports across campus.

While a number of 4-year institutions offer similar services, these generally tend to be more variable and limited in scope. As such, it is incumbent upon students and those who serve them develop a knowledge base about the level of services available at different types of institutions (2-year vs. 4-year) to facilitate the transition to postsecondary education.

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Findings Implication Brief

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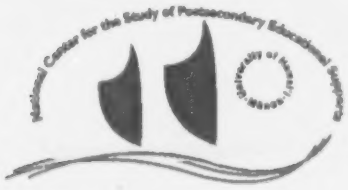
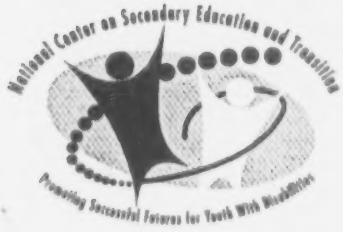


Issue Area: Survey Study 6 - Advocacy organizations for Students with Disabilities on college campuses



Author(s): Tom Harding, Ph D Candidate
University of Hawaii at Manoa, Center of Disability Studies

Summary of the Issue:

There is very little known regarding current practice concerning the provision of educational supports to students with disabilities at the postsecondary level. A national survey was conducted and provides crucial information for researchers seeking to ascertain the current status of educational supports in postsecondary programs. The survey and the sub-analyses have provided a comprehensive baseline of data to address issues concerning educational support provision.

Study Questions/Method:

Do colleges across the nation offer advocacy organizations for Students with Disabilities (SWDs)?

A national survey instrument was developed and distributed to a national sample more than 1500 disability support coordinators (DSC). More than 650 respondents completed the survey providing a profile of characteristics. The respondents within the sample was profiled as follows: 422 were from public schools vs. 193 from private schools; 246 were from two-year or less than two-year schools vs. 369 from four-year schools.
Respondents were asked:

"Is there an advocacy organization on campus for SWDs?"

Findings:

One of the most striking findings of the survey is that only 1 in 4 schools offers an advocacy organization on campus for students with disabilities, and of those that do, only 1 in 4 offer the organization any financial, advisory, or other means of support.

Implications by Audience:

Findings for this question indicates an apparent lack of interest on the part of postsecondary institutions in providing or supporting on campus advocacy organizations with a focus on SWDs. Responses to this question may also indicate that disability support offices on postsecondary campuses may not view self-advocacy as a service or support they should provide. Students with disabilities and those who provide them with secondary transition services, need to be aware that on-campus advocacy organizations are generally not available at postsecondary institutions.

In contrast, a national focus group project conducted by the RRTC seeking the perceptions of SWDs found that self-advocacy skills and supports were one of the most critical needs for students when they seek to access and participate in postsecondary education programs. The importance of possessing self-advocacy skills and having access to an organization that understands postsecondary educational settings is viewed as very important to students with disabilities. Further, having access to an advocacy organization focused upon the interests and needs of SWDs is considered a valuable resource; a resource that is generally not offered. As such, it is incumbent upon students and those who serve them develop a knowledge base about the level of services available to facilitate the transition to postsecondary education.

Those postsecondary programs that do sponsor or have an advocacy organization on campus seem to provide little financial, advisory or other support for that organization. It is difficult for a student-focused organization on campus to survive or be effective without some support from the host institution. Through advocacy organizations, students with disabilities can have a unified voice that may influence administrators in funding and policy decisions that may improve the provision of educational supports and services on campus. However, at this point, a unified voice of Students with disabilities at postsecondary educational settings is most unlikely.

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Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

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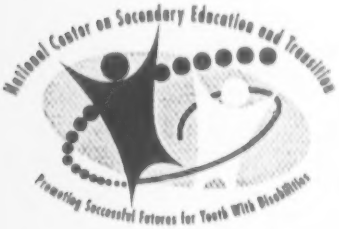


Issue Area: Survey Study 6
Assistive Technology Supports

Author(s): Tom Harding, University of Hawaii at Manoa, Center of Disability Studies

Summary of the Issue:

There is very little known regarding current practice concerning the provision of educational supports to students with disabilities at the postsecondary level. A national survey was conducted and provides crucial information for researchers seeking to ascertain the current status of educational supports in postsecondary programs. The survey and the sub-analyses have provided a comprehensive baseline of data to address issues concerning educational support provision.

Study Questions/Method:

- What is the availability and use of technology for students with disabilities (SWDs) across the nation? Several questions were asked in order to gain a baseline for Assistive Technology (AT) supports availability.

A national survey instrument was developed and distributed to a national sample more than 1500 disability support coordinators (DSC). More than 650 respondents completed the survey providing a profile of characteristics. The respondents within the sample was profiled as follows: 422 were from public schools vs. 193 from private schools; 246 were from two-year or less than two-year schools vs. 369 from four-year schools. Respondents were asked:

"What is the capacity of your institution to offer the following supports or accommodations as needed by SWDs?"

Types of Supports Frequency Count (Question #1):

0 = not offered
1 = offered less than 25% of time
2 = offered 25-50% of time
3 = offered 51-75% of time
4 = offered more than 75% of time

Question #1	Percentages: based on 650 respondents				
	0	1	2	3	4
1-q) real-time captioning	71%	9	3	3	15%
1-r-1)AT evaluations for students	59	14	7	5	16
r-2) skills training on equipment/software	29	16	14	11	30
r-3) Equipment or software provision	35	16	12	12	26
r-4) AT supports across campus	25	12	14	15	35

7- Does your institution offer:

Distance learning for students who are deaf or blind-	NO	YES
(1) accessible library services?.....	52%	48%
(2) accessible on-line student services (e.g. registration). . .	67	33
(3) accessible TV courses (e.g. captioning, descriptive narration)	80	20
(4) accessible Web-based courseware?	66	34

Findings:

Overall, Assistive technology (AT) offerings for SWDs are not readily available. Public schools offer AT supports across campus (e.g. library, computer lab), more readily than the private schools.

When comparing supports offered at 2-year and 4-year schools, 2-year schools offer far more support for SWDs. Educational supports such as learning centers laboratory, equipment or software provision, skills training on equipment/software, are more readily available at 2-year schools.

For the majority of students who are deaf and blind, on-line services such as registration, TV courses, web-based courseware, and library services are not offered.

Implications by Audience:

- Secondary Education students, their parents, and school personnel need to ganin information and understanding about the Assistive technology supports available by college upon application.

  The needs of persons with deafness and blindness to access-on-line services should be further studied.

  Private schools should be made aware of the major deficits in their programs regarding access to technology for SWDs.

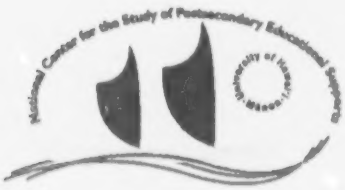
  The provision of AT within 2-year schools could be demonstrated as a model for all postsecondary institutions to follow.

Contact Information: Tom Harding, Ph D canidate , (808) 956-2820.

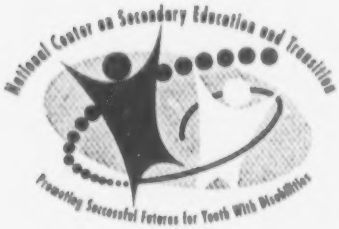
Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa



Issue Area: Survey Study 6 - The transfer of effective supports for students with disabilities to their postgraduate employment settings



Author(s): Tom Harding, University of Hawaii at Manoa, Center of Disability Studies

Summary of the Issue:

There is very little known regarding current practice concerning the provision of educational supports to students with disabilities at the postsecondary level. A national survey was conducted and provides crucial information for researchers seeking to ascertain the current status of educational supports in postsecondary programs. The survey and the sub-analyses have provided a comprehensive baseline of data to address issues concerning educational support provision.

Study Questions/Method:

Do postsecondary programs coordinate the transfer of effective supports for students with disabilities to their postgraduate employment settings?

A national survey instrument was developed and distributed to a national sample of more than 1500 disability support coordinators (DSC). More than 650 respondents completed the survey providing a profile of characteristics. The respondents within the sample was profiled as follows: 422 were from public schools vs. 193 from private schools; 246 were from two-year or less than two-year schools vs. 369 from four-year schools. Respondents were asked:

"Has your program attempted to coordinate the transfer of effective supports to their post-graduate employment setting? "

Findings:

61% of schools offer career/vocational assessment and counseling, and 46% offer job placement services. However, this seems to be where support ends- approximately only 1 in 4 schools facilitate transfer of supports to the work setting.

73% of the respondents answered "**NO**" to the question, "Has your program attempted to coordinate the transfer of effective supports to their post-graduate employment setting?"

Implications by Audience:

Students with disabilities (SWD)s- may find it difficult to integrate into a work setting without effective supports in place.

Employer- may find it difficult to accommodate new hire with specific needs without appropriate supports in place.

Clearly a smoother transition from school to the work setting would occur if transfer of supports to the work setting were to take place. It could well make the difference in 'successful' employment. Success is being defined here as a good attitude toward the work setting, resulting in high productivity from the new employee. During student lead focus group activities, SWDs expressed significant concerns and fears about subsequent employment opportunities following postsecondary education. Concern for the transfer of supports to the workplace was one of a list of fears faced by students as they approach and progress though education. Most students express uncertainty about whom, if anyone will be of assistance ad are fearful that employers will not provide supports as offered in school, thus making their education meaningless.

NEEDED: Support Provision Information Dissemination Program- To help bridge the gap between school and employment setting. Postsecondary schools could ask in questionnaire format which of the supports SWDs found to be most effective and which they think would be most useful in the work setting.

Once a student secures a job they contact the support carryover program office and inform them of new employer information. Program officer contacts new employer and shares information with them regarding the types of support that student found to be most helpful while at school.

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Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

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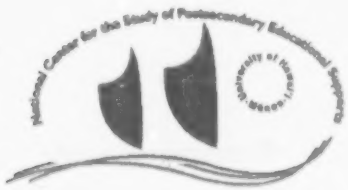
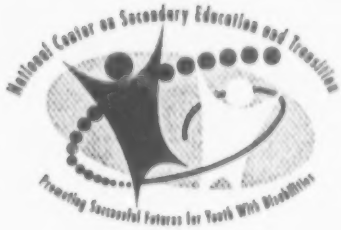


Issue Area: Promising Practice Resulting in Improved Program and Student Outcomes - Study 7



Author(s): Margo Izzo, Researcher, Improving the Quality of Higher Education Programs for Students with Disabilities, Ohio State University Collaborative Site

Summary of the Issue:

Results of the *National Survey of Postsecondary Educational Supports for Students with Disabilities* revealed that a wide range of supports are being offered through disability support offices in postsecondary education programs. Further findings, based upon the voices of students with disabilities who participated in a series of *National Focus Groups*, revealed that a number of factors, beyond the provision of educational supports, created barriers to their success in postsecondary education and subsequent employment. Those factors included:

- Negative attitudes and lack of knowledge by faculty members concerning the diverse attributes and needs of students with disabilities,
- Lack of coordination of supports and services with faculty instruction, related services provision and other campus activities available to all students,
- Lack of coordinated information or advocacy supports for students with disabilities

The need to improve the climate of higher education programs for students with disabilities has been the focus of a $5,000,000 demonstration grant program funded by the Office of Postsecondary Education, U.S. Department of Education. The purpose of this grant program is to provide technical assistance and professional development activities for faculty and administrators so that these individuals will assure that a quality

education for students with disabilities is available within their institution. In an effort to capture the activities of this grant program, the staff of these 21 grants submitted "promising practices" that they were implementing to improve the climate across their campuses. A matrix of promising practices was developed that describes the characteristics and intended outcomes of a variety of strategies that are being implemented across a minimum of 30 campuses nationwide.

Study Questions/Method:

- What are the characteristics of promising program models being implemented by the 21 demonstration projects funded by the Office of Postsecondary Education?
- What types of professional development activities are being implemented by the program models?
- Who are the critical stakeholders involved in model project implementation?

During the past year the United States Department of Education, Office of Postsecondary Education (OPE) selected twenty-one postsecondary programs for funding to demonstrate innovative and promising models of faculty and institutional development, resulting in improved program and student outcomes. Each of the twenty-one funded projects was selected as a promising program model or practice, providing a potential database for study across the projects. Also, each of the project programs has the potential to generate data on the effectiveness of model or practice characteristics and to assess program and student outcomes.

A framework has been developed to describe the characteristics of promising practices underway within the twenty-one projects. Peters and Heron (1993) proposed that the following five criteria be applied to all potential best practices under consideration to ensure that these practices represent a reliable, valid and critical aspect of a program: (a) the practice is well grounded in theory: (b) the practice is supported empirically through studies that are internally and externally valid; (c) the practice has some underpinnings in existing literature; (d) the practice is associated with meaningful outcomes; and (e) the practice is socially valid. In addition, consumers validated emerging promising practices through a focus group consisting of postsecondary students with disabilities. The responses to these questions guided the selection process to assure that these promising practices are socially valid, from the perspective of key stakeholders, namely students themselves. Through the writing and review process, each practice is continually validated from the perspective of the end user. The authors applied these criteria to the practices featured in this brief.

Findings:

- Project staff from the 21 demonstration projects funded by OPE submitted 63 different promising practices that are being implemented to improve the quality of postsecondary education for students with disabilities.
- These 63 promising practices were categorized into three broad areas: (1) assessing the climate of the department, college or entire institution, (2)

administrator and faculty professional development, and (3) building capacity for institutional change.

- The strategies that were most often reported to assess the climate of the 21 institutions were focus groups, surveys and advisory committees.
- Approximately 50% of the universities and colleges involved in the postsecondary grant program used focus groups to assess the climate of a department or institution.
- Of the 21 institutions involved in the postsecondary grant program, 43% used survey research techniques to obtain input from faculty and administrators regarding faculty needs and preferred training formats.
- Of the 21 institutions involved in the postsecondary grant program, 15% reported using advisory committees and forums to discuss issues regarding the quality of education for students with disabilities

- Approximately 20% of postsecondary grant programs provided self-advocacy instruction and support. Once students have the skills to understand and disclose their disability and needed accommodations, then students themselves can increase faculty awareness and cooperation.
- All 21 projects (100%) have been using some form of technology to provide faculty training on a variety of topics. These topics include, but are not limited to: Universal Instructional Design, accommodations, adaptive equipment, campus resources, and teaching strategies for instructing students with disabilities.
- Nine of the 21 projects (43%) are infusing distance education into their professional development activities.
- Approximately 50% of the projects are including accessible web design activities into their work. Furthermore, five (24%) of the projects have created centers existing only to train and educate people in development of accessible web pages, distance education courses and on-line course segments.
- Administrative and faculty directives, informing faculty of policies and institutional practices, is being used by seven (33%) of the projects. Activities encompassed in administrative and faculty directives include (a) written notices sent yearly from the Provost's office describing the university's commitment to diversity (b) faculty training sponsored by the Provost's office (c) and distribution of an informational package to all faculty.
- The majority of the 21 projects involve other faculty development units across their campuses, in addition to disability services providers. By collaborating with potential users and supporters, project staff and faculty have an increased awareness of issues related to accommodating students with disabilities.

Implications by Audience:

- Need to identify the relationship between promising program characteristics, as determined effective, and improvements in intermediate program outcomes, such as levels of faculty attitudes and knowledge, levels of support/accommodation coordination with related services, and others.
- Need to explore the relationship between assessed intermediate program outcomes and the improvement of ultimate student outcomes, such as program satisfaction, grades, graduation rates, and subsequent employment.
- Need to determine the effectiveness of self-advocacy on student outcomes, such as grades, graduation rates, and subsequent employment.
- Need to involve many different partners across the postsecondary institution that focus on faculty and student development.

References

Izzo, M.V.; Hertzfeld, J.E.; Simmons-Reed, E.; & Aaron, J.A. Promising practices: Improving the quality of higher education for students with disabilities. Submitted for publication, October, 2000).

Peters, M.T., & Heron, T.E. (1993). When the best is not good enough: An examination of best practice. The Journal of Special Education, 26, 371-385.

Contact Information:

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Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa

Issue Area: Promising Practice Resulting in Improved Program and Student Outcomes - Study 7

Author(s): Margo Izzo, Researcher, Improving the Quality of Higher Education Programs for Students with Disabilities, Ohio State University Collaborative Site

Summary of the Issue:

Results of the *National Survey of Postsecondary Educational Supports for Students with Disabilities* revealed that a wide range of supports are being offered through disability support offices in postsecondary education programs. Further findings, based upon the voices of students with disabilities who participated in a series of *National Focus Groups*, revealed that a number of factors, beyond the provision of educational supports, created barriers to their success in postsecondary education and subsequent employment. Those factors included:

- Negative attitudes and lack of knowledge by faculty members concerning the diverse attributes and needs of students with disabilities,
- Lack of coordination of supports and services with faculty instruction, related services provision and other campus activities available to all students,
- Lack of coordinated information or advocacy supports for students with disabilities

The need to improve the climate of higher education programs for students with disabilities has been the focus of a $5,000,000 demonstration grant program funded by the Office of Postsecondary Education, U.S. Department of Education. The purpose of this grant program is to provide technical assistance and professional development activities for faculty and administrators so that these individuals will assure that a quality

education for students with disabilities is available within their institution. In an effort to capture the activities of this grant program, the staff of these 21 grants submitted "promising practices" that they were implementing to improve the climate across their campuses. A matrix of promising practices was developed that describes the characteristics and intended outcomes of a variety of strategies that are being implemented across a minimum of 30 campuses nationwide.

Study Questions/Method:

- What are the characteristics of promising program models being implemented by the 21 demonstration projects funded by the Office of Postsecondary Education?
- What types of professional development activities are being implemented by the program models?
- Who are the critical stakeholders involved in model project implementation?

During the past year the United States Department of Education, Office of Postsecondary Education (OPE) selected twenty-one postsecondary programs for funding to demonstrate innovative and promising models of faculty and institutional development, resulting in improved program and student outcomes. Each of the twenty-one funded projects was selected as a promising program model or practice, providing a potential database for study across the projects. Also, each of the project programs has the potential to generate data on the effectiveness of model or practice characteristics and to assess program and student outcomes.

A framework has been developed to describe the characteristics of promising practices underway within the twenty-one projects. Peters and Heron (1993) proposed that the following five criteria be applied to all potential best practices under consideration to ensure that these practices represent a reliable, valid and critical aspect of a program: (a) the practice is well grounded in theory: (b) the practice is supported empirically through studies that are internally and externally valid; (c) the practice has some underpinnings in existing literature; (d) the practice is associated with meaningful outcomes; and (e) the practice is socially valid. In addition, consumers validated emerging promising practices through a focus group consisting of postsecondary students with disabilities. The responses to these questions guided the selection process to assure that these promising practices are socially valid, from the perspective of key stakeholders, namely students themselves. Through the writing and review process, each practice is continually validated from the perspective of the end user. The authors applied these criteria to the practices featured in this brief.

Findings:

- Project staff from the 21 demonstration projects funded by OPE submitted 63 different promising practices that are being implemented to improve the quality of postsecondary education for students with disabilities.
- These 63 promising practices were categorized into three broad areas: (1) assessing the climate of the department, college or entire institution, (2) administrator and faculty professional development, and (3) building capacity for institutional change.
- The strategies that were most often reported to assess the climate of the 21 institutions were focus groups, surveys and advisory committees.

- Approximately 50% of the universities and colleges involved in the postsecondary grant program used focus groups to assess the climate of a department or institution.
- Of the 21 institutions involved in the postsecondary grant program, 43% used survey research techniques to obtain input from faculty and administrators regarding faculty needs and preferred training formats.
- Of the 21 institutions involved in the postsecondary grant program, 15% reported using advisory committees and forums to discuss issues regarding the quality of education for students with disabilities.
- Approximately 20% of postsecondary grant programs provided self-advocacy instruction and support. Once students have the skills to understand and disclose their disability and needed accommodations, then students themselves can increase faculty awareness and cooperation.
- All 21 projects (100%) have been using some form of technology to provide faculty training on a variety of topics. These topics include, but are not limited to: Universal Instructional Design, accommodations, adaptive equipment, campus resources, and teaching strategies for instructing students with disabilities.
- Nine of the 21 projects (43%) are infusing distance education into their professional development activities.
- Approximately 50% of the projects are including accessible web design activities into their work. Furthermore, five (24%) of the projects have created centers existing only to train and educate people in development of accessible web pages, distance education courses and on-line course segments.
- Administrative and faculty directives, informing faculty of policies and institutional practices, is being used by seven (33%) of the projects. Activities encompassed in administrative and faculty directives include (a) written notices sent yearly from the Provost's office describing the university's commitment to diversity (b) faculty training sponsored by the Provost's office (c) and distribution of an informational package to all faculty.
- The majority of the 21 projects involve other faculty development units across their campuses, in addition to disability services providers. By collaborating with potential users and supporters, project staff and faculty have an increased awareness of issues related to accommodating students with disabilities.

Implications by Audience:

- Need to identify the relationship between promising program characteristics, as determined effective, and improvements in intermediate program outcomes, such as levels of faculty attitudes and knowledge, levels of support/accommodation coordination with related services, and others.
- Need to explore the relationship between assessed intermediate program outcomes and the improvement of ultimate student outcomes, such as program satisfaction, grades, graduation rates, and subsequent employment.
- Need to determine the effectiveness of self-advocacy on student outcomes, such as grades, graduation rates, and subsequent employment.
- Need to involve many different partners across the postsecondary institution that focus on faculty and student development.

References

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Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa

Issue Area: Promising Practices Resulting in Improved Programs and Studies (Faculty) - Study 7

Author(s): Lynn Nakahara

Summary of the Issue:

To provide technical assistance and professional development activities for faculty and administrators so that these individuals will assure that a quality education for students with disabilities is available within their institution. The staff of twenty-one grants funded by the Office of Postsecondary Education submitted "promising practices" that they were implementing to improve the climate across their campuses. A matrix of promising practices was developed that describes the characteristics and intended outcomes of a variety of strategies that are being implemented across a minimum of 30 campuses nationwide.

Study Questions/Method:

- What are the characteristics of promising program models being implemented?
- What types of professional development activities are being implemented by the program models?
- Who are the critical stakeholders involved in model project implementation?

Findings:

- These promising practices were categorized into three broad areas: (1) assessing the climate of the department, college or entire institution, (2) administrator and faculty professional development, and (3) building capacity for institutional change.

- Approximately 20% of postsecondary grant programs provided self-advocacy instruction and support. Once students have the skills to understand what accommodations are needed for their disability, they can increase faculty awareness and cooperation.
- Nine of the twenty-one projects (43%) are infusing distance education into their professional development activities.
- Administrative and faculty directives, informing faculty of policies and institutional practices, is being used by seven (33%) of the projects.
- The majority of the twenty-one projects involve other faculty development units across their campuses, in addition to disability services providers.

Implications by Audience:

- Need to explore and construct secondary education learning climates similar to those the students with disabilities will encounter in postsecondary institutions, by teachers, special education personnel, and principals.
- Need to identify effective methods of transitioning students with disabilities to postsecondary institutions in regard to climate, department development, and college.
- Need to inform students with disabilities about various services (e.g. distance education and informed faculty) available at postsecondary institutions to aid in their education, by high school counselors and special education teachers.
- Need for students with disabilities to become skilled at requesting proper levels of support and accommodation.
- Need to educate students with disabilities about attitudes and knowledge regarding students with disabilities in postsecondary institutions, by secondary and special education personnel.

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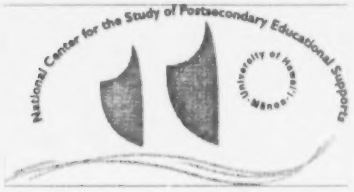
Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa



Issue Area: Focus Group Discussions on Supports and Barriers in Lifelong Learning (MS# 031-H01) – Study 8

Author(s): John Anderson, MA & Katharina Heyer, PhD Candidate

Summary of the Issue: To explore the student-consumer perspectives regarding the nature and availability of educational supports and services, and the transition to subsequent employment, students and graduates with disabilities participated in focus groups at ten sites nationwide. Focus group discussions centered on postsecondary supports and services, accommodations and barriers, relations with peers and faculty, and the preparation for the workforce.

Study Questions/Method:

- What are the experiences and perceptions of students with disabilities regarding their access to and participation in postsecondary programs?
- What educational supports are available, effective, and/or necessary for students with disabilities?
- How well do their postsecondary experiences prepare students with disabilities for employment, and what are their perspectives concerning transition to the workplace?
- Focus groups composed of prospective, current, and former students with disabilities were conducted at 10 sites nationally. The groups were designed, with participant input, to elicit student-consumer perspectives regarding the issues of supports and barriers in the postsecondary setting and the workplace. Researchers generated a list of main issues from each focus group that were then grouped into four general categories of supports and barriers: 1) peer, 2) faculty, 3) administrative, and 4) workplace/employment. The results at each site were then analyzed across the groups to reveal both recurring and site specific issues.

Findings:

- **Importance of student disability services:** Disability support providers are committed and supportive, often offering guidance beyond their job descriptions.
- **Coordination of support services:** Students long for a "partnership" between external services, campus disability services and the school administration.
- **Institutional concerns:** Disability policy at postsecondary institutions does not reflect practice, and students still need to fight for basic accommodations. The administrative process for implementing policy can be unwieldy and time-consuming.
- **Student-centered needs:** Students feel their lives are "micromanaged" by support services, rather than having service providers focus on individual needs. Student needs must be determined by the students themselves.
- **Accommodations stigma:** Non-disabled peers often question the accommodations given to students with disabilities, especially for those with learning or other hidden disabilities. These accommodations are often seen as "unfair advantages."
- **Self disclosure:** Students with disabilities are reluctant to self-disclose to faculty, because they have experienced faculty unwilling or unable to accommodate their needs. Once students self-disclose, faculty must maintain their privacy.
- **Faculty ignorance:** Postsecondary faculty are often unaware of disability issues and are not well educated about the needs and rights of students with disabilities.
- **Faculty teaching styles:** Faculty also must learn different teaching styles to accommodate specific disabilities.
- **Faculty mentoring:** Faculty mentoring offers a valuable resource for students with disabilities to succeed in the postsecondary environment.
- **Peer socialization:** Peers can provide guidance by example and be an information resource. Peers are an important link to integrate students with disabilities into the campus community.
- **Role of family:** Family generally plays an important and supportive role for students with disabilities, but family can also be overprotective and discouraging.
- **Assistive technology:** Lack of access to assistive technology is perceived as a political problem rather than a logistic one.
- **Preparation for employment:** Many feel that postsecondary education mainly helps by increasing self-confidence and marketability, which are important assets in the workplace. The expectation that a college education will lead to employment may conflict with assumptions that people with disabilities are unemployable.
- **Transition to employment:** Students fear the transition to employment because they expect workplace discrimination and to be denied special accommodations, and thus prepare to self-advocate more aggressively.

Implications by Audience:

- *Postsecondary faculty* need to be aware of disability issues, especially around student rights and disclosure concerns, use diverse teaching styles, and reflect on their role as a potential mentor for students.
- *Student disability service providers* should continue providing committed service, try to forge a partnership with administrators and faculty, treat students as individuals, and help with disclosure concerns.
- *Postsecondary administrators* need to work with student disability services, implement disability policy goals, ensure that faculty are aware of the issues and providing accommodations, provide funding for assistive technologies, and consider linking student disability and employment services.
- *Employers* need to be aware of disability rights and should proactively address disability issues in their workplace.
- *Family* should continue to provide support and try not to be overprotective. Parents and family of secondary students should be careful about discouraging their children from going on to postsecondary education.
- *Other postsecondary students* should not question necessary accommodations, avoid stigmatizing students with disabilities, and continue being there as peers, friends and information sources.
- *Secondary students with disabilities* should be prepared to self-advocate, especially with faculty and administration when necessary to get accommodations and services. It is advisable to look for potential faculty or staff mentors and establish a network of peer supports. Do not accept the limitations that others may try to impose.
- *Secondary support staff* should allow students to help determine their own needs, treat students as individuals, prepare them with self-advocacy skills, connect them to secondary support services, and be knowledgeable about assistive technologies.
- *Secondary teachers* should also consider their role as mentors to students, use a variety of teaching styles, and respect students' needs.

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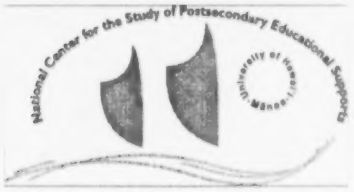
Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa



Issue Area: Extended Transition Services for Youth with Disabilities – Study 9

Author: Margo Vreeburg Izzo, Ph.D.

Summary of the Issue:

Employment outcomes for youth with disabilities exiting public schools have not improved during the last decade (Benz & Lindstrom, 1997; Edgar, 1988;Wagner, 1993, Wehman, Kregel & Barcus, 1985). Findings from the National Longitudinal Transition Study (NLTS) indicated that only 46% of youth with disabilities were competitively employed one to two years following high school, compared to 50% of a demographically similar group from the general population (Wagner, 1991). The NLTS study indicated that many former students with disabilities were unemployed or underemployed. Of those who were competitively employed, only 38% earned more than minimum wage. Parents and students reported that 61% of these students needed vocational services one year after high school (Benz, Yovanoff & Doren, 1997).

This brief highlights a study that extended transition services beyond graduation and significantly increased employment earnings. Specific transition services delivered included vocational assessment, agency contacts, IEP/transition meetings, extended vocational training, employability counseling, job club, job interview preparation, job development, and job coaching

Study Questions/Method:

A pretest- posttest control group design examined the effects of extending transition services beyond graduation on employment earnings of vocational graduates with disabilities. The study population were nominated by vocational special needs staff as at-risk for not maintaining employment following

graduation. If graduates agreed to participate in the study, they were randomly assigned to the experimental or control group, controlling for race, gender, and previous work experience. Chi-square and t-tests analyses indicated that there were no significant differences between the two groups on gender, race, disability, and IQ variables. Young adults in the experimental group (n= 43) participated in a transition intervention program following graduation. Control participants (n=33) were paid an annual stipend to share their employment and independent living experiences.

A parent/student follow-up questionnaire was distributed five years after the delivery of extended transition services to determine the long-term effects of extending transition services on employment and independent living outcomes. Analyses were conducted to address the following research hypotheses:

1. Earnings of the experimental group will be significantly higher following the delivery of extended transition services than for participants in the control group.

2. Employment rates for participants in the experimental group will be significantly higher than those for the control group, 4 to 6 years following the termination of extended transition services.

3. The percentage of youth receiving job benefits will be significantly higher for participants in the experimental group than for those in the control group, 4 to 6 years following the termination of extended transition services.

Findings:

The results indicated that youth who received extended transition services had significantly higher earnings for two years following the termination of services than youth who did not receive extended transition services. Specifically –

- The average earnings of the first four quarters (the first year after intervention) for the experimental group were $6,744, whereas the control group earned $3,502,

- During the second year after exiting their program, the experimental youth earned $7,336, whereas the control youth earned $4,534,

- On average, youth who received services earned approximately $3,000 more per year than their peers who did not receive these services.

Through a follow-up survey conducted five years after intervention services ended, we found that youth in the experimental group who received extended transition services were significantly more likely to be employed or in a training program than youth in the control group who did not receive extended transition services. In addition, -

- Approximately 50% of participants in both groups were reported to receive health insurance and paid vacations,

- The experimental participants were significantly more likely to be active in social groups and to have savings accounts and credit cards, than youth in the control group,

- Parents reported that vocational training, counseling, and job placement services were most helpful in assisting their son or daughter in gaining employment. Less than one-half of the parents who received IEP meeting coordination reported that these meetings helped their son or daughter gain employment.

Implications by Audience:

Educators, Transition Specialists and Rehabilitation Counselors

- Expand and individualize the delivery of transition services during high school. Services such as vocational assessment, vocational training, employability counseling, job development and job interview skills need to be a major component of the secondary school experience. Skills needed for job success need to be infused into the curriculum throughout the grades, but also need to be taught on an individualized basis.

- Add a thirteenth and fourteenth vocational training program as a postsecondary option. In contrast to their age-mates, many students with disabilities are not sufficiently mature or skilled to successfully enter the labor force full time after a four-year high school program. For many of these students, a preferred option might be to postpone graduation for two years for an extended vocational program. Students can focus on completing the high school requirements during the initial four years, and then enroll in a vocational program and work in a related field during a 13th and 14th year program.

- Provide employability counseling and job development transition services. Many youth need employability counseling and job development services to assist with the initial entry into the labor market. As part of this technical assistance, provide additional linkages to adult service agencies, as appropriate.

School and Adult Service Program Administrators

- Strengthen the coordination services across school and adult service agencies. Improve communication among service providers and the family so that a smooth continuum of services can be planned and implemented as the youth leaves school and enters community employment with the support of adult service providers.

- Coordinate outcome data collection efforts with adult programs. Provide on-going monitoring of the graduates' work performance, earnings, and post-secondary outcomes.

- Expand adult service recruitment and service delivery efforts. Several participants in the control group were not employed because they were not connected to or aware of adult services as part of the secondary school's transition program. Adult service agencies need to include these graduates in their service delivery programs.

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For a complete review of the above study, see –

Izzo, M.V., Cartledge, C., Miller, L.E., Growick, B. & Rutkowski. (2000). Improving employment earnings: Extended transition services that make a difference. *Career Development for Exceptional Individuals, 23* (2), 139 – 156.

The above study was funded in part by Grant 133F70016 from the National Institute on Disability and Rehabilitation Research, U.S. Department of Education.

Findings Implication Brief

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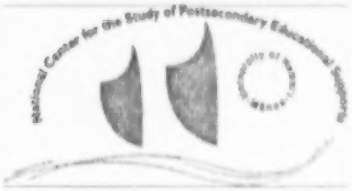
University of Hawai'i at Manoa



Issue Area: Examination of the Status of the Inclusion of Students with Developmental Disabilities, including Significant Cognitive Disabilities, in Postsecondary Education – Study 9

Author(s): Jean L. Johnson, DrPH

Summary of the Issue:

Thus far, concerns for post-secondary supports for students with disabilities have primarily focused on those students who met institutional criteria for admission, but because of their disabilities, required supports and services to enhance the likelihood of their success in post-secondary programs.

Little attention has yet been paid to opportunities for those students with significant developmental disabilities, including cognitive disabilities, to participate in post-secondary educational programs or to programs to encourage them to become life-long learners. These students would not meet the usual admission criteria to matriculate in vocational or community college programs.

When their eligibility under IDEA ends at the age of 21, many of students lack continuing opportunities for inclusion with the age-peers in living, learning, and social activities. Self-determination at the age of 21 provides few choices when post-secondary educational opportunities are closed to them and job opportunities are limited.

Study Questions/Method:

A search of the literature has been conducted to address the following questions:

- What is the literature on promising post-secondary program models and practices for students with developmental (including cognitive) disabilities?
- What are the current program models in place and what are the characteristics of the institutions with inclusive post-secondary programs for students with developmental disabilities?
- What are the characteristics of the students who have matriculated in those programs?
- What kinds of course work has been available for those students?
- What are the measures of "effectiveness" to be applied to measuring student outcomes?
- How does the inclusion of students with developmental disabilities in post-secondary programs enhance the likelihood of their subsequent employment?
- What policies and recommendations are appropriate to further expand opportunities for the inclusion of students with developmental disabilities in post-secondary educational programs?

Findings:

A search of the literature has revealed a paucity of information on the subject. Further searching, synthesis, and analysis of the findings are underway.

Implications by Audience:

Disabled Young Adults: Young adults with developmental disabilities are acutely aware of the limited opportunities that exist for post-secondary inclusion. They are seeking further opportunities for learning and social activities with their peers.

Parents: Parents of young adults with developmental disabilities are keenly interested in developing options for their sons and daughters. Parents are frustrated with the current lack of post-secondary opportunities in education, social activities, and vocational placements.

Secondary Institutions. Secondary institutions need to be aware of postsecondary education as an option for students with cognitive disabilities and plan for the inclusion for students in both age appropriate and post high school classes.

Post-Secondary Institutions. The findings of this study will be important to these institutions to enable them to better serve their community and to avoid potential litigation because of excluding young adults who may qualify for admission to their programs.

Policy-Makers. Policy-makers and legislators need to be educated about these needs and the possibilities. They need to know what is working and how successful models can be replicated at a local and national level.

Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

University of Hawai'i at Manoa

Issue Area: Analysis of Recent Policy and other Federal Directives as they may Effect People with Disabilities - Study 10

Author(s): Jen Graf

Summary of the Issue: On July 1, 2000 the Workforce Investment Act (WIA) took affect, replacing the Job Training Partnership Act (JTPA). The overall purpose of WIA is to create and integrated workforce preparation and employment system that meets the need of job seekers and those seeking to advance their careers, as well as the employment needs of the nation's employers. Persons with disabilities are among the people who are supposed to benefit from such a restructuring. This new federal policy could lead to changes in the manner in which students with disabilities are supported in post secondary education and other life long opportunities leading to subsequent employment.

Study Questions/Method: This study examined both the WIA policy and a pilot implementation of the nine states that received grants to test implementation of WIA regulations. All information, including resources from Cornell University, available to computer based and on-line searches of electronic databases regarding the issue was analyzed.

Findings: The Workforce Investment Act (WIA) appears to be a powerful piece of legislation. It has the potential to make a positive impact upon persons with disabilities who are seeking career advancement and training within post secondary education programs. Both the review and analysis suggest that federal policy and state implementation plans, for the most part, address the training and employment needs of persons with disabilities, as well as the role of postsecondary education programs in addressing those needs. It is also evident that, given the wording of federal policy and initial state plan guidance, there may be significant opportunities

for persons (including youth) with disabilities to be supported in the attainment of postsecondary education, and subsequent employment goals. The perceived benefits of WIA are:

1. Immediate access to a variety of agencies;
2. One Stop partners are learning about the services of other partners and working to provide a full range of services;
3. A broader community is being built around employment and training programs;
4. Accessibility to all One Stop partners services has improved;
5. Services truly are better coordinated; and
6. The shift of the government from process to product and customer satisfaction.

Also, given past negative experience regarding the inclusion of persons with disabilities within the federal educational and employment legislation and state level guidance, there is reason for concern that their needs may not receive the necessary attention. Possible barriers could be: fear, sharing, gatekeepers, money and risk and responsibility.

Implications by Audience:

-Students with disabilities need to educate themselves about their rights under WIA, in order to make informed decisions.
-Post secondary institutions and state vocational rehabilitation agencies need to use this information in career education, especially for students with disabilities.
-Workforce investment boards need to work for nondiscrimination of people with disabilities and use the exposure of such as guides in designing their own programs.

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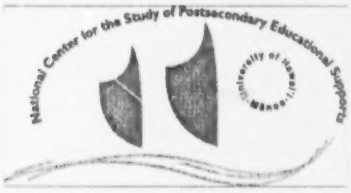

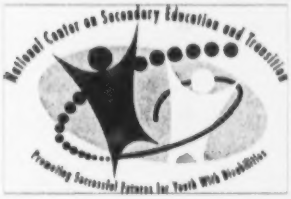

Issue Area: Accessibility Policy for Postsecondary Distance Education – Study 11

Author(s): John Anderson, University of Hawaii at Manoa

Summary of the Issue: Distance education is a rapidly growing mode of educational delivery that promises to increase access to postsecondary education for, among others, people with disabilities. However, some practices and technologies create new barriers, especially for students with visual and hearing disabilities. The California Community Colleges, the largest system of postsecondary education with 107 colleges and over 1.5 million students, has recently established a rigorous set of accessibility guidelines for distance education that could serve as an exemplary model for others.

Study Questions/Method:

- How will distance education policy and implementation in the California Community College (CCC) system improve access to postsecondary education for people with disabilities?
- What are the main issues concerning the accessibility of postsecondary distance education courses for students with disabilities in the CCC system?
- How will supports and accommodations be provided in CCC distance education to meet the standard of *equally effective communication* for all students?
- Will distance learning faculty be responsible to ensure accessibility in their courses? How will they be supported?
- How might a better understanding of accessibility policy and implementation in the CCC system help other postsecondary distance education providers to increase access and success for students with disabilities?
- This policy and implementation analysis will triangulate information from multiple sources on distance education in the CCC system, using techniques suggested by Hargrove (1975), Stiles (1993), and Pressman and Wildavsky (1973).

Findings:

- In order to provide quality postsecondary distance education, colleges and universities should collaborate to redesign existing instructional and support services for virtual environments, particularly to ensure accessibility for students with disabilities. The California Community Colleges Chancellor's Office (CCCCO) plays a central role in the development of distance education systemwide, and can take the lead on accessibility issues. The CCCCO interprets and suggests accessibility policy, lobbies for funding, helps provide technical support, coordinates efforts at the various colleges, and collects data. They have even been able to hire a full-time web accessibility specialist.
- To ensure the accessibility of distance education, it is important to establish clear goals, standards and accountability, which may be achieved through multiple levels of policy. In response to the US Department of Education's Office of Civil Rights, and based on federal and state policy, the CCCCO developed an important set of accessibility guidelines for distance education in all of the system's community colleges. The individual college districts ultimately have responsibility for ensuring that distance education courses meet accessibility standards.
- Student success depends on the availability of support services, particularly for students with disabilities or other special needs. California Community Colleges are working to provide a full range of support services for distance education programs.
- Faculty need support and incentives to make accessible distance education courses. In the California Community Colleges there are: faculty awards for distance education websites that include accessibility in the criteria, technical support, and requirements at some colleges that faculty consider the accessibility of distance courses before approval. There are also faculty training workshops with an accessibility component.
- Making distance education more accessible is interconnected with increasing the accessibility of related technologies, such as webpages, electronic texts and audio-video production. Postsecondary institutions should work with private industry on the development of universal accessibility, assistive technologies, and standards.

Implications by Audience:

- *Postsecondary administrators* should connect with other institutions to develop high quality distance learning programs that are accessible to all. Clear goals and standards regarding accessibility need to be clearly established at the college level. Faculty need support in developing accessible courses. Distance education students need to be provided a full range of supports. Administrators should encourage collaboration between the university and private industry to develop accessibility standards and technologies, as well as accessible academic materials.
- *Postsecondary faculty* need to consider accessibility when designing distance education courses and should get administrative support. Important resources for faculty include technical experts, models of accessible courses, training and workshops, and any appropriate technologies.
- *Policy makers* should establish policy standards and provide funding to help make distance education equally accessible to all students. Policies should support the practices mentioned above. The CCCCO guidelines could be adapted for local use.

- *Students with disabilities* should demand a high standard of accessibility for distance education programs. The CCCCO guidelines could be used as a benchmark and to promote the standard of "equally effective communication" for all students.

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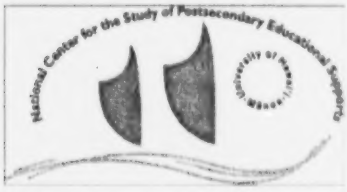

Issue Area: Transition from High School to Postsecondary Education and Employment for Students with Disabilities – Study 12

Author(s): Sheryl Burgstahler, Ph.D.
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Weol Soon Kim-Rupnow, Ph.D.
University of Hawaii

Summary of the Issue:

People with disabilities experience higher unemployment rates and lower earnings than their non-disabled peers. They are less prepared to meet the challenges of adulthood, more likely to continue to live with their parents after high school, and engage in fewer social activities.
As the end of high school approaches, so does the termination of a structured environment and pre-college support systems. Many young people with disabilities have few friends and limited support from peers and mentors. The impact of social isolation is far-reaching, affecting not only friendships, but also academic and career success. Although higher education can enhance their employability and vocational success, fewer young adults with disabilities participate in post-secondary education and, of those who begin such programs, students with disabilities are more likely than non-disabled students to drop out of school prior to completion.

Students with disabilities can benefit from interactions with peers and adults with disabilities who are pursuing and participating in academic and career activities that they might otherwise have thought impossible for themselves. However, they are often isolated by great distances, transportation and scheduling challenges, communication limitations, and other obstacles that make it difficult for them to meet and interact in person. Computer-mediated communication (CMC), where people use computers and networking technologies to communicate with one another, can connect people separated by time and space who might not otherwise meet. Adaptive technology makes it possible for anyone to participate in computer-mediated communication regardless of disability. The combination of adaptive technology and Internet communication can help overcome the geographic, temporal, and disability-related barriers to establishing peer and mentor support groups and thereby reduce social isolation and allow independent access to information resources. A combination of in-person activities and CMC support has the potential to improve the postsecondary and career outcomes for young people with disabilities. Research is needed to identify the long-term impact of CMC and other supports.

Study Questions/Method:

The questions to be addressed in this study are:

- What is the impact of various aspects of a model program that supports computer-mediated communication (CMC) with peers and mentors, on-campus summer study programs and other supports on the transition of high school students with disabilities to higher education and employment?
- How can other programs apply the successful practices developed in this model program in order to improve academic and career outcomes for students with disabilities?

An exploratory study, building on earlier work (Burgstahler, 1997; Burgstahler, Baker, & Cronheim, 1997), is being undertaken to examine the role that CMC, summer study programs, and other support activities can play in easing the social isolation and advancing the academic and career goals of students with disabilities.

Participants. DO-IT (Disabilities, Opportunities, Internetworking, and Technology) is the winner of many awards, including the President's Award for "embodying excellence in mentoring underrepresented students and encouraging their significant achievement in science, mathematics, and engineering," the Golden Apple Award in Education, and the National Information Infrastructure Award. It is directed at the University of Washington. Operating since 1992, it is primarily funded by the National Science Foundation (NSF), the U.S. Department of Education, and the State of Washington. DO-IT programs work to increase the participation of students with disabilities in challenging academic programs and careers, such as science, technology, engineering, and mathematics. DO-IT Scholars, college-bound high school students with disabilities, meet face-to-face during live-in summer study programs at the University of Washington in Seattle. Year-round they use the Internet to communicate with each other and with adult mentors and to access information resources. A wide range of disabilities is represented in the group, including mobility impairments, hearing impairments, visual impairments, health impairments, and specific learning disabilities.

Data. In the first phase of the study, follow-up data will be collected from previous DO-IT Scholars through an e-mail questionnaire to investigate long-term impact of CMC, summer studies, and other DO-IT activities on post-secondary education and employment outcomes.

Findings:

The survey has not yet been conducted.

Implications:

Implications for service providers and researchers include: (a) Identification of effective components of Internet support services that are most likely to result in high levels of consumer access and satisfaction in postsecondary education and employment.; (b) an exemplary transition model to help facilitate their transition support program planning and implementation overall; (c) preparation of secondary school students to be computer literate so they are able to use the computer as a tool to network, search information, and so on; and (d) provision of home computers and assistive technology as needed for an easy access to the Internet.

References:

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Burgstahler, S. E., Baker, L. M., & Cronheim, D. (1997) Peer-to-peer relationships on the Internet: Advancing the academic goals of students with disabilities. *National Educational Computing Conference '97 Proceedings*. Washington, D. C.: T. H. E. Journal and NECA, Inc.

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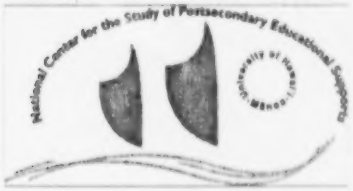

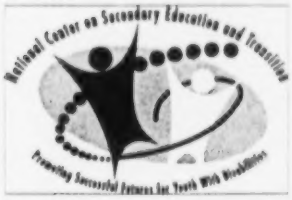

Issue Area: The Role of Families of Students with Disabilities in Postsecondary Education; Study 13

Author(s): Teresa Whelley
Jen Graf

Summary of the Issue: Youth with disabilities have been educated in increasingly inclusive settings for the past 25 years, yet, students with disabilities are often not prepared to enter college. Students with disabilities do not have opportunities to develop skills to advocate for themselves in secondary school. The launching period into adulthood is a time when typical families have decreasing parental responsibilities as youth grow in social and financial independence. But families of youth with disabilities often encounter an increase in their responsibilities during this time. Students with disabilities need assistance accessing the system of supports found at the post-secondary level. Students with disabilities who participated in the National Focus Groups (NCSPES, 2000) found the array of supports conflicting and wanted the system of supports to be more coordinated.

Study Questions/Method: Using focus groups for students with disabilities, their family members and disability support coordinators we are doing an study to explore the experiences and perceptions of students with disabilities, family members of students with disabilities and Disability Support Coordinators regarding the role of family members in providing supports to students with disabilities in post-secondary education. More specifically:

1. What are the discrepancies among the experiences and perceptions among these groups?
2. What role don't parents/family play?
3. In which functions do students with disabilities need assistance?
4. Who provides each type of assistance and support?
5. How should supports and assistance be coordinated?

Findings: Preliminary impressions seem to show that families are appropriately supportive- financially and emotionally encouraging. Students with disabilities seem to generally welcome family support.

Implications by Audience:

-Students with disabilities need to identify the support they need and want from their families.
-Disability Support Coordinators need to include family members regarding students' decisions if students agree to this type of inclusion.
-Family members need to learn to value their supportive roles.
-High school counselors and special education teachers need to inform parents of the change in legal status of those who are eighteen years old.

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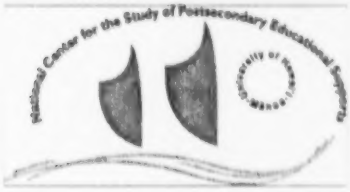

Issue Area: An Ocean of Potentiality: Inclusion of Persons with Disabilities in Science, Engineering and Mathematics – Study 14

Author(s): Richard Radtke, PhD, Shane Gilmore, MSc., Teresa Whelley, EdD

Summary of the Issue:

Persons with disabilities are underrepresented in science, mathematics, engineering, and technology (SMET) careers, frequently to the detriment of the vitality of the United States' participation in scientific and technical enterprises. This situation is exacerbated by low career expectations for persons with disabilities among students, parents, teachers and administrators. (Cunningham& Nobel, 1998; Jones, 1997; Steven 1996 & Raloff,1991).

Students with disabilities are seldom advised or encouraged to prepare for occupations in science, engineering, and mathematics. Many children and youth with disabilities do not regard a vocation in science, engineering, or mathematics as achievable. Often, in a form of "self fulfilling prophesy", they do not select the necessary subjects in junior and senior high school and community college to prepare for higher education in these fields. Students with disabilities, families, school counselors, teachers and even special education teachers frequently lack an awareness of the make-up and requirements of science, engineering, and mathematics programs in higher education. Furthermore, there is often a lack of knowledge of the technology (including assistive technology) and other "accessible" resources that would make it practicable for students with disabilities to pursue science, engineering, and mathematics careers (Burgstahler, 1992).

Students with disabilities often lack access or knowledge of role models who are successful in the careers in which they are interested. The lack of interaction between students with disabilities (Stevens *et al.* 1996) and role models can often lead to low aspirations and motivation to achieve success in science, engineering

and math. Students with disabilities are often separated from potential role models by obstacles of transportation and geography (Heidari, 1996;Noe 1988 &Smith & Jones ,1999)(a particularly acute situation on our Neighbor Islands), leaving such individuals isolated from a community of colleagues and peers.

Study Questions/Method:

The goals of the Ocean of Potentiality Project are 2-fold: first, to tangibly support targeted youth with disabilities in Hawaii to envision and prepare for careers in science, math and engineering; and second, to carefully evaluate project activities and outcomes to identify the strategies that work (including appropriate assistive technology supports and the barriers that need to be overcome in order for Hawaii's schools to prepare all youth for careers in science, math and engineering. The first goal relates to "direct service" -- whereas, the second goal focuses on "systems change".

1. Support schools to initiate "inclusive", exciting, globally connected Science activities.

2. Share the findings of the project with educational planners and concerned citizens.

Data will be gathered regarding pre-intervention and post-intervention student attitudes toward career plans, academic goals and expectations, interest level in science related activitjes, willingness to engage in problem solving and project-based activities, and measurable levels of self esteem. Methods will include on site-observations, student/teacher satisfaction ratings, interviews, follow-up surveys, interviews and performance surveys. Follow-up data will also be gathered through one of the project's two websites: an interactive website promotes continued long-term contact with project mentors through chat-room venues and solicits student participation in videography projects—the Through the Viewfinder segments on the site are 90% student produced. Approximately 30% of students who have participated in camps have become re-involved in related activities through the website.

Camps include youths aged thirteen through mid twenties experiencing a diversity of disabilities. The program establishes at least a one to one mentor to student ratio--higher for difficult cases such as youths experiencing depression, or demonstrating hostility. Mentors are drawn from various backgrounds, including the military, education, science related fields, other professions, family and friends; many are returning volunteers. Past student experiences have included conservation activities with Fish and Wildlife; tide-pool exploration; beach geology--effects of erosion; kite design; taro patch work, and a cattle ranch excursion. Access to technology--an important aspect of camps--includes a full computer lab with twenty computers, peripherals—scanners, photo imagery, digital and video cameras, and a computer exploration—tear down experience. All camps include a community service component, for example a beach clean up and community dog wash for elderly and disabled Hansen's disease survivors at Kalaupapa

The evaluation plan will involve two major activities: impact assessment as outlined above and monitoring of the implementation process. Examples of data to be gathered under implementation will include: reports on preparatory activities; preparation of curriculum and teaching materials; identification of target population at the school level; criteria for selection; dissemination of information; etc.

Findings:

While the project is only in its third year of funding, preliminary data suggest:

- Students are inclined to increase levels of involvement in school-based science activities as a result of involvement.
- Several older students have reportedly enrolled in related subjects at the community college level.
- Increased expectations have assisted in raising student goals.
- Peer support contributes to the discovery-learning environment.
- Long term mentorship associations can be successfully formed.
- Accessibly issues can be overcome.

Implications by Audience:

- Secondary education students and their parents need to know that physical limitations are not a barrier to successful science careers.
- Secondary educators and counselors need to know that application science and field research are effective and motivating.
- There needs to be an increased awareness of applied/ field based program by secondary educators.
- Secondary students need to broaden their horizons.

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Findings Implication Brief

National Center for the Study of Postsecondary Educational Supports (NCSPES)

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Issue Area: Transition from Two-Year to Four-Year Institutions for Students with Disabilities – Study 15

Author(s): Sheryl Burgstahler, Ph.D., Lyla Crawford, University of Washington, Collaborative Site, Joie Acosta, University of Hawaii, Manoa, CDS, RRTC

Summary of the Issue:

Students with disabilities in two-year colleges face challenges as they transition to four-year schools. Some are similar to those faced by their non-disabled peers, however some are related to their disabilities. This study was undertaken to determine the concerns of students with disabilities in two-year institutions of higher education (community and technical colleges) as they transfer to four-year schools, and steps that can be taken by both two-year and four-year institutions to improve the postsecondary outcomes of these transfer students.

Study Questions/Method:

1. What are students most concerned about when they are transferring from a two-year to a four-year postsecondary program?

2. How can two-year and four-year institutions help students with disabilities successfully transfer to four-year schools?

To answer the research questions posed in this study, quantitative and qualitative research methods were utilized. Methods included a quantitative survey of one hundred and nineteen disabled students from nineteen colleges in Washington State to explore the concerns of students with disabilities as they transfer from two-year schools to four-year institutions. After responding to the Likert scale questions, they were also given a chance to respond to the question in an open-ended format.

Furthermore, a survey was distributed to the directors of disabled student services offices at 2409 postsecondary institutions; 15% of the offices responded. The survey instrument asked

respondents to rate challenges faced by two-year college students. In addition, a total of twenty-one faculty and staff from seven postsecondary institutions in Washington State participated in focused discussions to supplement the responses from the survey and explore practical interventions for institutions to implement.

Findings:

Concerns of college students with disabilities regarding the transfer from two-year to four-year schools

- Students rated the top concerns when transferring to a four-year institution in the following order: the cost of the program, skills in self-advocacy, differences in social life (making new friends), availability of educational accommodations, access to technology, differences in academic requirements (keeping up with other students academically), and availability of tutors. These were rated from most important to least important, respectively.
- In a separate open-ended response, students listed concerns such as differences in disabled student services, inadequate financial support, the entire transferring process housing/transportation difficulties, and differences in academic requirements.

Challenges faced by postsecondary students with disabilities

- Disabled student services staff rated the challenges faced by transfer students with disabilities in the following order: unprepared to address the differences in academic requirements, poor study skills, inadequate pre-college academic preparation, lacks skills in requesting accommodations and self-advocacy, lack of role models and mentors with disabilities, inadequate financial support, difficulty in adjusting to the differences in support services, and difficulty adjusting to the differences in social life
- Postsecondary faculty and staff participating in focus groups reported that challenges faced by students with disabilities transferring from two-year to four-year institutions include: moving away from home, understanding and working through the transfer process, securing financial support, meeting admissions requirements and academic standards, adjusting to differences in disability documentation requirements and disability-related services offered, and adjusting to a larger, less personal environment.

How Four-Year Institutions Can Increase the Transfer Success Rate

- Make sure that campus recruiters, admissions staff and academic counselors are knowledgeable about disabled student services.
- Include information about services for students with disabilities in all general student orientations, student handbooks and other publications and programs.
- Attend two-year college career/transfer "fairs" to share information about services and programs for students with disabilities.
- Educate faculty and staff about disability and transfer issues, accommodation strategies and resources. Create summary sheet of all intake and documentation requirements for all state schools and standardize if possible.
- Address campus access issues (dorm rooms, transportation, technology) proactively.
- Create a publication and World Wide Web pages with procedures and campus map/overview.
- Have separate orientation sessions for students with disabilities.
- Simplify the process when possible.

How Two-Year Institutions Can Increase the Transfer Success Rate

- Disabled student services and other campus staff should become more familiar with four-year colleges' policies, procedures, programs, and services.
- Educate the faculty and staff about disability and transfer issues, accommodation strategies and resources (e.g. new faculty orientations).
- Share information about transfer strategies and steps using publications and the World Wide Web.

- Assure documentation used is acceptable to most four-year schools and give students a copy of their disability documentation to take to four-year schools.
- Provide academic and career counseling to students with disabilities, which may include how a four-year degree might support their goals.
- Encourage transfer students to select four-year schools early and help them make good choices.
- Help students develop transition plans and work through the transfer process (e.g. has to fill out financial aid forms).
- Help students develop self-advocacy skills.
- Arrange visits to four-year schools for students with disabilities so they can learn about services, sit in classes, talk to faculty, and meet other students with disabilities.

How Two-Year and Four-Year Schools Can Work Together to Increase Transfer Success Rate

- Visit each other's campuses to become more aware of campus climate, offerings, and services.
- Develop a cooperative relationship between disabled student services offices; coordinate activities; cooperate and follow through; share resources.
- Coordinate acceptance of documentation.
- Create a state/regional advisors group of faculty, staff and students from two-year and four-year schools to advocate for transfer students with disabilities and discuss program and policy issues.
- Cosponsor transfer fairs that include disabled student services information.
- Coordinate campus visits between two-year and four-year students with disabilities.
- Facilitate contact between two-year and four-year students with disabilities; coordinate peer mentoring.
- Develop a one-on-one handoff system for students with disabilities.

Implications by Audience:

- There is a need for student support staff to do more to ease the transition for students with disability. Specific examples for four-year staff and two-year staff are given.
- There is a need for student support staff to work together to create a cooperative relationships between disabled student services offices to help students successfully transfer.
- There is a need for skill improvement by students with disabilities in such areas as self-advocacy, requesting accommodations, and study/time management/ organization.
- There is need for further research in this area. The present study was limited by response rate to staff survey and a narrow participant population. Generalizing these results is not suggested.
- The aforementioned suggestions for making transfer from two-year to four-year postsecondary institutions more successful can offer valuable insights to service providers, faculty, staff and students in secondary institutions.

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Products & Publications

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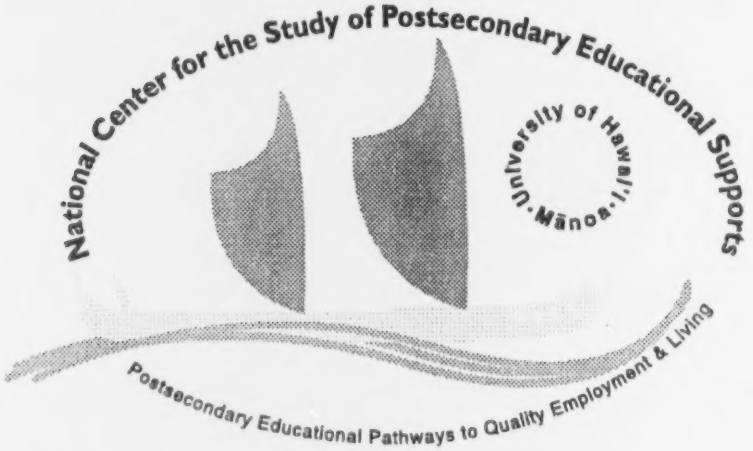
National Center for the Study of Postsecondary Educational Supports
University of Hawai'i-Mānoa
Postsecondary Educational Pathways to Quality Employment & Living

The purpose of the Rehabilitation Research and Training Center (RRTC) on Postsecondary Supports is to conduct a strategic program of research, training, technical assistance, and information dissemination focused upon educational supports that increase access and improve outcomes for persons with disabilities in postsecondary education programs and subsequently, in the labor force. As a result of Phase I studies, four areas of study have emerged as needing further exploration: (1) secondary education and preparation for postsecondary education, (2) supports availability and quality in postsecondary education, (3) the coordination of these supports, and (4) the transition of the students and their supports to employment. Fifteen studies have commenced from these areas to date, three of which have been completed.

Spring 2001

The following Research Reports have been produced by members of the National Center for the Study of Postsecondary Educational Supports (NCSPES) Rehabilitation Research & Training Center (RRTC), Center on Disability Studies (CDS) at the University of Hawaii at Manoa. Consortium Members consist of the Institute on Community Integration, University of Minnesota; Institute for Community Inclusion, University of Massachusetts, Boston; Rehabilitation Research & Training Center on Supported Employment, Virginia Commonwealth University; and Association on Higher Education & Disabilities (AHEAD), University of Massachusetts, Boston. Collaboration Sites include: Ohio State University – Improving the Quality of Higher Education Programs for Students with Disabilities; University of Massachusetts at Boston; DO-IT Program, University of Washington; and NSF Bridges Project –Holt Public Schools, Michigan.

In-House Reports & Documents

Phase I National Review Forum

The RRTC held its first National Review Forum at the Hale Koa Hotel in Honolulu, Hawai'i on March 9 and 10, 2000. The Review Forum was originally proposed as an important planning and evaluation time in the overall Strategic Forum of Research of the National Center. The purpose of Phase I was to review and characterize current issues and concerns establishing a platform on which to build intervention and policy research. To this end a packet of briefing materials was compiled and distributed to forum attendees prior to the event to aid in their preparation to participate. This *National Review Briefing Packet* is available providing an excellent overview of Phase I research activities.

Outcome information from the National Review Forum is available in the *Summary Proceedings* document. Both of these documents can be accessed by request through Juana Tabali Weir at juana@hawaii.edu.

Phase I Findings and Topical Review Briefs

The majority of documents generated from Phase I research activities have been abstracted in **"Brief"** format of two, four or eight pages each. Each brief has been developed for a targeted audience and seeks to share the basic findings of relevance to that audience. A listing of briefs currently available is as follows:

Study Area 4a - Literature

- Topical Review - Facilitating Information Access for Postsecondary Students with Visual Impairments Who Use Braille: Issues and Promising Practices
- Topical Review - Challenges to and Recommendations for Providing Effective Support for Minority People with Disabilities
- Topical Review - Postsecondary Education & Employment
- Topical Review - Postsecondary Supports
- Topical Review - Secondary School Influences and Postschool Outcomes
- Topical Review - Secondary School Curricula Issues
- Topical Review – Pursuing Postsecondary Education Opportunities for Individuals with Disabilities
- Topical Review – Comprehensive Career Planning
- Topical Review – Enhancing the Postsecondary Campus Climate for Students with Disabilities
- Topical Review – Present and Promising Practices in Postsecondary Education for Students with Severe Cognitive Disabilities
- Topical Review – A State Profile of Current Practices in Community Colleges for Students with Significant Disabilities
- Topical Review – Trends in Distance Education – Implications for Improving Access and Outcomes for Individuals with Disabilities in Postsecondary Programs

Study Area 4b – Focus Groups (consumer perspective)

- Coordination of Support Services
- Transition to Employment
- Faculty Mentors and Peer Role Models
- Faculty Awareness of Disability Rights

Study Area 4c – Case Reports (consumer perspective)

- Students with Disabilities in Postsecondary Education

Study Area 4d – National Survey of Educational Support Offerings

- Types and Frequency of Educational Supports in Postsecondary Programs
- Support for On-Campus Advocacy Organizations
- Assistive Technology Supports
- Transfer of Supports to the Workplace
- Two-Year Schools versus Four Year Schools
- Public Postsecondary Schools vs. Private Postsecondary Schools
- Written Policy Regarding Educational Supports
- Outreach of Supports to the Community
- Profile of Disability Support Coordinator Characteristics
- Types of Disability Receiving Supports in Postsecondary Settings

Technical Reports

- National Survey of Educational Support Provision to Students with Disabilities: Postsecondary Education. (2000). NCSPES, Honolulu, Hawai'i: University of Hawai'i at Manoa. (MS#038-H01)
- Postsecondary Education and Employment for Students with Disabilities: Focus Group Discussions on Supports and Barriers in Lifelong Learning. (2000). NCSPES, University of Hawai'i at Manoa. Honolulu, Hawai'i: University of Hawai'i at Manoa. (MS#039-H01)
- National Survey of Educational Support Provision to Students with Disabilities in Postsecondary Education Settings – A Technical Report. (2000). NCSPES, Honolulu, Hawai'i: University of Hawai'i at Manoa. (MS#037-H01)

Phase II Study Proposal and Findings Briefs

1. An Intervention Study: Banking on Cultural Capital—Creating Value-added Learning for Persons with Disabilities in Postsecondary Settings. Yuen, J., & Shaughnessy, B. (MS#016-H01)
2. Longitudinal Analysis of the Experiences of Students with Disabilities with Postsecondary Support Provision: Characteristics of Effective Support Systems. Sharpe, M., & Johnson, D. (MS#017-H01)
3. Documenting Effective Models in the Provision of Educational Supports to Persons with Disabilities in Postsecondary Education and Subsequent Work Settings. Anderson, J., & Whelley, T. (MS#018-H01)
4. Effective Instructional Strategies and Supports for Students with Learning Disabilities in Postsecondary Education. Getzel, E. (MS#019-H01)
5. Trends Found in Postsecondary Education Services through the Vocational Rehabilitation System for Persons with Disabilities. Hart, D. (MS#020-H01)
6. Secondary Data Analysis of Promising Educational Support Practices for Students with Disabilities as found in Two-year Postsecondary Settings. Harding, T., & Chang, C. (MS#021-H01)

7. Promising Practices Resulting in Improved Programs and Studies. Izzo, M. (MS#022-H01)

8. Comparative Analysis of Disability Policy: Implication for Postsecondary Education and Employment. Heyer, K. (MS#023-H01)

9. Examination of the Status of the Inclusion of Students with Developmental, including Significant Cognitive, Disabilities in Postsecondary Education. Johnson, J., & Martin, E. (MS#024-H01)

10. Analysis of Recent Policy and Other Federal Directives as they May Benefit Persons with Disabilities in Postsecondary Education Settings. Graf, J., Heyer, K., & Jahier, R. (MS#025-H01)

11. Distance Education and Students with Disabilities. Anderson, J., & Burgstahler, S. (MS#026-H01)

12. Impact of the Internet on Higher Education and Employment Outcome of Students with Disabilities. Kim-Rupnow, W. S., & Burgstahler, S. (MS#027-H01)

13. The Role of Families of Students with Disabilities in Postsecondary Education. Whelley, T., Graf, J., & Burgstahler, S. (MS#028-H01)

14. An Ocean of Potentiality: Inclusion of Persons with Disabilities in Science Engineering and Mathematics. Radtke, R. (MS#029-H01)

15. Transition for Two-year to Four-year Postsecondary Institutions for Students with Disabilities. Acosta, J., & Burgstahler, S. (MS#030-H01)

Phase II Findings Briefs

#2. Longitudinal Analysis of the Experiences of Students with Disabilities with Postsecondary Support Service Systems—Characteristics of Effective Support Systems. Michael N. Sharpe, Institute on Community Integration, University of Minnesota

#7. Promising Practices Resulting in Improved Programs and Studies. Margo Vreeburg Izzo, Nisonger Center at the Ohio State University

#10. Analysis of Recent Policy and Other Federal Directories as They May Benefit Persons with Disabilities in Postsecondary Settings. Jen Graf, University of Hawaii at Manoa.

#15. Transition for Two-year to Four-year Postsecondary Institutions for Students with Disabilities. Joie Acosta, University of Hawaii at Manoa.

Phase II Study Implication Briefs (Topics)

1. Self-determination and Self-Advocacy Skills. **Author(s):** Margo Vreeburg Izzo, Ph.D., Nisonger Center at the Ohio State University

2. Self-determination and self-advocacy strategies are now being positioned within postsecondary settings in an attempt to increase the number of students with disabilities who attend colleges and universities and improve graduation rates. **Author (s):** Brian Shaughnessy, J.D. & JoAnn W.L. Yuen, Ed.D.

3. A 20/20 Analysis of Postsecondary Support Characteristics. **Author(s):** Michael N. Sharpe, David R. Johnson

4. Models of Postsecondary and Employment Success. **Author(s):** John Anderson & Teresa Whelley, University of Hawaii, Manoa, CDS, RRTC

5. Workplace and Postsecondary Supports. **Author(s):** Lynn Nakahara, University of Hawaii, Manoa, CDS, RRTC

6. Effective instructional strategies for students with learning disabilities in postsecondary education. **Authors:** Getzel, E. E., Wehman, P., & McManus, M.S., Virginia Commonwealth University, Rehabilitation Research and Training Center

7. Trends in Postsecondary Education Services in the Vocational Rehabilitation System for Individuals with Disabilities

8. Postsecondary Education Supports & Employment. **Author(s):** Dana Gilmore, Jennifer Shuster, and Debra Hart

9. Area(s) of study: Comparison of 2- year institutions versus 4-year institutions in offering supports and accommodations for Students with Disabilities. **Author(s):** Tom Harding, Ph D Candidate, University of Hawaii at Manoa, Center on Disability Studies

10. Advocacy organizations for Students with Disabilities on college campuses. **Author(s):** Tom Harding, Ph D Candidate University of Hawaii at Manoa, Center on Disability Studies

11. Assistive Technology Supports. **Author(s):** Tom Harding, University of Hawaii at Manoa, Center on Disability Studies

12. Disability Support Coordinator Characteristics. **Author(s):** Chuan Chang, PhD Candidate University of Hawaii, Manoa, CDS, RRTC

13. Public postsecondary programs vs. private postsecondary programs. **Author(s):** Chuan Chang, Ph D Candidate University of Hawaii, Manoa, CDS, RRTC

14. The transfer of effective supports for students with disabilities to their postgraduate employment settings. **Author(s):** Tom Harding, University of Hawaii at Manoa, Center on Disability Studies

15. Written policies regarding educational supports. **Author(s):** Chuan Chang, Ph.D. Candidate University of Hawaii, Manoa, CDS, RRTC.

16. Promising Practices Resulting in Improved Programs and Studies (Faculty). **Author(s):** Lynn Nakahara, University of Hawaii, Manoa, CDS, RRTC

17. Promising Practice Resulting in Improved Program and Student Outcomes. **Author(s):** Margo Vreeburg Izzo, Nisonger Center at the Ohio State University.

18. Extended Transition Services for Youth with Disabilities. **Author(s):** Margo Vreeburg Izzo, PhD, Nisonger Center at the Ohio State University

19. Examination of the Status of the Inclusion of Students with Developmental Disabilities, including Significant Cognitive Disabilities, in Postsecondary Education. **Author(s):** Jean L. Johnson, DrPH, University of Hawaii, Manoa, CDS, RRTC

20. Analysis of Recent Policy and other Federal Directives as they may Effect People with Disabilities. **Author(s):** Jen Graf, University of Hawaii, Manoa, CDS, RRTC

21. Accessibility Policy for Postsecondary Distance Education. **Author(s):** John Anderson, University of Hawaii at Manoa

22. Transition from High School to Postsecondary Education and Employment for Students with Disabilities. **Author(s):** Sheryl Burgstahler, Ph.D., University of Washington; Weol Soon Kim-Rupnow, Ph.D., University of Hawaii

23. The Role of Families of Students with Disabilities in Postsecondary Education. **Author(s):** Teresa Whelley & Jen Graf, University of Hawaii, Manoa, CDS, RRTC

24. An Ocean of Potentiality: Inclusion of Persons with Disabilities in Science, Engineering and Mathematics. **Author(s):** Richard Radtke, PhD; Shane Gilmore, MSc.; Teresa Whelley, Ed.D

25. Transition from Two-Year to Four-Year Institutions for Students with Disabilities. **Author(s):** Sheryl Burgstahler, Ph.D., Lyla Crawford, University of Washington, Collaborative Site, Joie Acosta, University of Hawaii, Manoa, CDS, RRTC

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How to Obtain the Materials Mentioned in this Booklet

Effective June 30, 2000 all documents listed in this booklet may be obtained by going to the NCSPES website at www.rrtc.hawaii.edu for viewing, downloading, and making a print copy.

You may also request copies of the documents listed in this booklet by contacting the RRTC Administrative Assistant, Juana Tabali Weir, at juana@hawaii.edu or by calling (808) 956-3975.

There is no charge for downloading documents off of the RRTC website or requesting documents to be received via email attachment – requests should be made to juana@hawaii.edu.

Please note that there will be a $10.00 charge for the first item and $5.00 for each additional item for all documents sent via mail (coverage for printing, handling, & postage). Checks & Purchase Orders should be made out to RCUH. Documents will not be mailed until payment has been received.

Mail inquiries may be sent to the attention of Juana Tabali Weir at:

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